

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00650 Which National Elevator Codes and Supplements has the department adopted?

NATIONAL ELEVATOR CODES AND SUPPLEMENTS ADOPTED				
TYPE OF CONVEYANCE	NATIONAL CODE AND SUPPLEMENTS	DATE INSTALLED		COMMENTS
		FROM	TO	
((Elevators, Dumbwaiters, Escalators	American Standard Safety Code (ASA) A17.1, 1960	Prior to 11/1/1963		Adopted Standard- Part X of ASA applies to all installations in existence prior to 11/1/63.))
Elevators, Dumbwaiters, Escalators	American Standard Safety Code (ASA) ((A17.1, 1960)) <u>A17.1.13, 1962</u>	11/1/1963	12/29/1967	Adopted Standard
Moving Walks	American Safety Association A17.1.13, 1962	11/1/1963	12/29/1967	Adopted Standard
Elevators, Dumbwaiters, Escalators, and Moving Walks	U.S.A. Standards (USAS) USAS A17.1, 1965; Supplements A17.1a, 1967; A17.1b, 1968; A17.1c, 1969;	12/30/1967	2/24/1972	Adopted Standard USAS 1965 includes revision and consolidation of A17.1-1, 1960, A17.1a, 1963, and A17.1-13, 1962. Adopted code and supplements, excluding Appendix E and ANSI 17.1d, 1970.
Elevators, Dumbwaiters, Escalators, and Moving Walks	American National Standard Institute ANSI A17.1, 1971	2/25/1972	6/30/1982	Adopted Standard as amended and revised through 1971.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1971; A17.1a, 1972	2/25/1972	6/30/1982	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1981	7/1/1982	1/9/1986	Adopted Standard
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1a, 1982	3/1/1984	1/9/1986	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1b, 1983	12/1/1984	1/9/1986	Adopted Supplement, except portable escalators covered by Part VIII of A17.1b, 1983.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1984	1/10/1986	12/31/1988	Adopted Standard Except Part XIX. After 11/1/1988 Part II, Rule 211.3b was replaced by WAC 296-81-275.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1a, 1985	1/10/1986	12/31/1988	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1b, 1985; A17.1c, 1986; A17.1d, 1986; and A17.1e, 1987	12/6/1987	12/31/1988	Adopted Supplement

NATIONAL ELEVATOR CODES AND SUPPLEMENTS ADOPTED				
TYPE OF CONVEYANCE	NATIONAL CODE AND SUPPLEMENTS	DATE INSTALLED		COMMENTS
		FROM	TO	
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1987	1/1/1989	12/31/1992	Adopted Standard Except Part XIX and Part II, Rule 211.3b. WAC 296-81-275 replaced Part II, Rule 211.3b.
Elevators, Dumbwaiters, Escalators, and Moving Walks	((ANSI)) ASME A17.1, 1990	1/1/1993	2/28/1995	Adopted Standard Except Part XIX and Part V, Section 513. Chapter 296-94 WAC replaced Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	((ANSI)) ASME A17.1, 1993	3/1/1995	6/30/1998	Adopted Standard Except Part XIX and Part V, Section 513. Chapter 296-94 WAC replaced Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ASME A17.1, 1996	6/30/1998	((Effective date of these rules)) 6/30/2004	Adopted Standard Except Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ASME A17.1, 2000; A17.1a, 2002; A17.1b, 2003	((Effective date of these rules)) 7/1/2004	((Current)) 1/1/2008	Adopted Standards and Addenda Except Rules 2.4.12.2, 8.6.5.8 and Sections 5.4, 7.4, 7.5, 7.6, 7.9, 7.10, 8.10.1.1.3 and 8.11.1.1.
Safety Standards for Platform Lifts and Stairway Chairlifts	ASME A18.1, 1999; A18.1a, 2001; A18.1b, 2001	((Effective date of these rules)) 7/1/2004	((Current)) 1/1/2008	Adopted Standards and Addenda.
<u>Safety Code for Elevators, Escalators, Dumbwaiters, Residential Elevators, Special Purpose</u>	<u>ASME A17.1-2004; A17.1a-2005</u>	<u>1/1/2008</u>	<u>Current</u>	<u>Adopted Standards and Addenda Except Rules 2.4.12.2, marked car top clearance space, 8.6.5.8, Maintenance of safety bulkhead, 5.4, Private residence incline elevators, 7.4 & 7.5 & 7.9 & 7.10 Material lifts, 8.10.1.1.3 and 8.11.1.1, QEI-1 inspector.</u>
<u>Safety Code for Platform Lifts and Stairway Chairlifts</u>	<u>ASME A18.1-2005</u>	<u>1/1/2008</u>	<u>Current</u>	
<u>Safety Code for Belt Manlifts</u>	<u>ASME A90.1-2003</u>	<u>1/1/2008</u>	<u>Current</u>	
<u>Safety Code for Personnel Hoists, Retroactive</u>	<u>ANSI A10.4-2004</u>	<u>1/1/2008</u>	<u>Current</u>	
Note: Copies of codes and supplements can be obtained from The American Society of Mechanical Engineers, Order Department, 22 Law Drive, Box 2900, Fairfield, New Jersey, 07007-2900 or by visiting www.asme.org .				

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00700 Chapter definitions. The following definitions apply to this chapter (see RCW 70.87.010 for additional definitions necessary for use with this chapter):

"ANSI" means the American National Standard Institute.

"ASA" means the American Safety Association.

"ASME" means the American Society of Mechanical Engineers.

"Acceptable proof" refers to the documentation that must be provided to the department during the elevator contractor and mechanic license application and renewal process. Acceptable proof may include department-approved forms documenting years of experience, affidavits, letters from previous employers, declarations of experience, education credits, copies of contractor registration information, etc. Additional documentation may be requested by the department to verify the information provided on the application.

"Code" refers to nationally accepted codes (i.e., ASME, ANSI, ASA, and NEC) and(~~or~~) the Washington Administrative Code.

"Decommissioned conveyance" means an installation whose power feed lines have been disconnected and:

(a) A traction elevator, dumbwaiter, or material lift whose suspension ropes have been removed, whose car and counterweight rests at the bottom of the hoistway, and whose hoistway doors have been permanently barricaded or sealed in the closed position on the hoistway side;

(b) A hydraulic elevator, dumbwaiter, or material lift whose: Car rests at the bottom of the hoistway, pressure piping has been disassembled and a section removed from the premises, hoistway doors have been permanently barricaded or sealed in the closed position on the hoistway side, suspension ropes have been removed and counterweights, if provided, landed at the bottom of the hoistway; or

(c) An escalator or moving walk whose entrances have been permanently barricaded.

"Final judgment" means any money that is owed the department as the result of an individual's or firm's unsuccessful appeal of a civil penalty. Final judgment also includes any penalties assessed against an individual or firm owed the department as a result of an unappealed civil penalty or any outstanding fees due under chapter 70.87 RCW and this chapter.

"General direction--Installation and alteration work" means the necessary education, assistance, and supervision provided by a licensed elevator mechanic (in the appropriate category) who is on the same job site as the helper/apprentice at least seventy-five percent of each working day. The ratio of helper to mechanic shall be one-to-one.

"General direction--Maintenance work" means the necessary education, assistance, and supervision provided by a licensed elevator mechanic (in the appropriate category) to ensure that the maintenance work is performed safely and to code.

"Lockout" means the placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

"Primary point of contact" is the designated individual employed by a licensed elevator contractor.

"Red tag" or "red tag status" means an elevator or other conveyance that has been removed from service and operation because of noncompliance with chapter 70.87 RCW and this chapter or at the request of the owner.

"Private residence elevator" (residential elevator) means a power passenger elevator which is limited in size, capacity, rise and speed and is installed in a private residence or multiple dwelling as a means of access to a private residence provided the elevators are so installed that they are not accessible to the general public or to other occupants in the building.

"RCW" means the Revised Code of Washington.

"Tagout" means the placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed by the individual who established the tag or by a person designated by the chief elevator inspector.

"Traction elevator" means an elevator in which the friction between the hoist ropes and the machine sheave is used to move the elevator car.

"USAS" means the U.S.A. Standards.

"WAC" means the Washington Administrative Code.

PART B - ((~~LICENSES AND FEES FOR ALL ELEVATORS, DUMBWAITERS, ESCALATORS AND OTHER CONVEYANCES~~)) ELEVATOR CONTRACTOR AND CONVEYANCE MECHANIC LICENSES AND REGULATIONS AND FEES

NOTE: Total fees include the sum of the permit cost plus plan check fees.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00902 Are there exceptions from the elevator mechanic licensing requirements? Yes.

(1) Elevator mechanic licenses issued under chapter 70.87 RCW and this chapter are not required for:

(a) Individuals who install signal systems, fans, electric light fixtures, illuminated thresholds, finished cab flooring

materials that are identical to existing materials and feed wires to the terminals on the elevator main line control provided that the individual does not require access to the pit, hoistway, or top of the car for the installation of these items.

(b) An owner or regularly employed employee of the owner performing only maintenance work of conveyances in accordance with RCW 70.87.270.

(2) Elevator mechanic licenses may not be required for certain types of incidental work that is performed on conveyances when the appropriate lockout and tagout procedures have been performed by a licensed elevator mechanic in the appropriate category. The department must be notified in writing and must approve the scope of work prior to it being performed.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00904 What must you do to become and remain a licensed elevator contractor? (1) Obtain and maintain a valid specialty or general contractor registration under chapter 18.27 RCW to engage in the business of conveyance work.

(2) Complete and submit a department-approved application. As part of the application:

(a) Specify the employee who is the licensed elevator contractor's primary point of contact.

(b) The person representing the company, firm or company who is applying for the elevator contractor's license must:

(i) Provide acceptable proof to the department that shows that the person representing the company, firm, or company has five years of work experience in performing conveyance work as verified by current and previous state of Washington elevator contractor licenses to do business; or

(ii) Pass a written examination administered by the department on chapter 70.87 RCW and this chapter. (In the case of a firm or company, the exam will be administered to the designated primary point of contact.)

(iii) Failure to pass the examination will require the submittal of a new application.

(3) Pay the fees specified in WAC 296-96-00922.

(4) The department may deny application of a license under this section if the applicant owes outstanding final judgments to the department.

(5) If the primary point of contact identified in subsection (2)(a) of this section separates employment, his/her relationship or designation is terminated, or death of the designated individual occurs, the elevator contractor must, within ninety days, designate a new individual who has successfully completed the elevator contractor examination and inform the department of the change in

writing or the elevator contractor license will be automatically suspended.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00906 What must you do to become a licensed elevator mechanic? (1) Qualify for licensing:

(a) For conveyance work covered by all categories identified in WAC 296-96-00910 except material lifts (05), residential conveyances (06), residential inclined elevators (07) and temporary licenses (09), the applicant must comply with the applicable mechanic licensing requirements as follows:

(i) Test.

(A) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than three years' work experience in the elevator industry performing conveyance work as verified by current and previous employers licensed to do business in this state or as an employee of a public agency; and

(B) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

(ii) ~~((Grandfather.~~

~~(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than three years' work experience in the elevator industry, performing conveyance work, as verified by current and previous employers licensed to do business in this state or as an employee of a public agency; and~~

~~(B) Have worked without direct and immediate supervision for an elevator contractor licensed to do business in this state or as an employee of a public agency. This employment may not be less than three years immediately before March 1, 2004.~~

~~((iii)))~~ National exam/education.

(A) Have obtained a certificate of completion and successfully passed the mechanic examination of a nationally recognized training program for the elevator industry such as the National Elevator Industry Educational Program or its equivalent; or

(B) Have obtained a certificate of completion of an apprenticeship program for an elevator mechanic, having standards substantially equal to those of chapter 70.87 RCW and this chapter, and registered with the Washington state apprenticeship and training council under chapter 49.04 RCW.

~~((iv)))~~ (iii) Reciprocity. The applicant must provide acceptable proof to the department that shows that the applicant is

holding a valid license from a state having entered into a reciprocal agreement with the department and having standards substantially equal to those of chapter 70.87 RCW and this chapter.

(b) For conveyance work performed on material lifts as identified in WAC 296-96-00910(5):

~~((i))~~ Test.

~~((A))~~ (i) The applicant and the licensed elevator contractor/employer must comply with the provisions of RCW 70.87.245; and

~~((B))~~ (ii) The applicant must pass an examination administered by the department on chapter 70.87 RCW and this chapter;

~~((ii) Grandfather.~~

~~(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the material lift license category (see WAC 296-96-00910) performing conveyance work on material lifts, as verified by current and previous employers licensed to do business in this state; and~~

~~(B) Worked without direct and immediate supervision for an elevator contractor licensed to do business in this state. This employment may not be less than three years immediately before March 1, 2004.)~~

(c) For residential conveyance work covered by category (06) as identified in WAC 296-96-00910:

~~((i))~~ Test.

~~((A))~~ (i) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than two years' work experience in the elevator industry performing conveyance work as verified by current and previous employers licensed to do business in this state; and

~~((B))~~ (ii) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

~~((ii) Grandfather.~~

~~(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the residential conveyance license category (see WAC 296-96-00910) performing conveyance work on residential inclined and vertical wheelchair lifts and stair chairlifts, as verified by current and previous employers licensed to do business in this state; and~~

~~(B) Worked without direct and immediate supervision for an elevator contractor licensed to do business in this state. This employment may not be less than two years immediately before March 1, 2004.)~~

(d) For residential inclined conveyance work covered by category (07) as identified in WAC 296-96-00910;

~~((i))~~ Test.

~~((A))~~ (i) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category

(see WAC 296-96-00910) of not less than one year's work experience in the elevator industry or not less than three years' documented experience and education credits in conveyance work as described in category (01) performing conveyance work as verified by current and previous employers licensed to do business in this state; and

~~((B))~~ (ii) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

~~((ii) Grandfather.~~

~~(A) Before October 1, 2004, the applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the residential inclined conveyance license category (see WAC 296-96-00910) performing conveyance work on residential inclined conveyances, as verified by current and previous employers licensed to do business in this state; and~~

~~(B) Worked without direct and immediate supervision for an elevator contractor licensed to do business in this state. This employment may not be less than one year immediately before March 1, 2004.))~~

(e) For temporary mechanic licenses as identified in WAC 296-96-00910 category (09) the applicant must provide acceptable proof from a licensed elevator contractor that attests that the temporary mechanic is certified as qualified and competent to perform work under chapter 70.87 RCW and this chapter.

(2) Complete and submit a department-approved application.

~~((a) **Applications received before October 1, 2004.** If an applicant who meets subsection (1)(d)(i)(A) of this section, who applies before October 1, 2004, and is required to take an examination under the provisions of this section, the applicant may perform the duties of a licensed elevator mechanic until the applicant has been provided notice by the department of the results of his/her examination.~~

~~(b) **Applications received on or after October 1, 2004.))** An applicant who is required to take an examination under the provisions of this section may not perform the duties of a licensed elevator mechanic until the applicant has been notified by the department that he/she has passed the examination.~~

(3) Pay the fees specified in WAC 296-96-00922.

(4) The department may deny application of a license under this section if the applicant owes outstanding final judgments to the department or does not meet the minimum criteria established in the elevator laws and rules.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00910 What are the elevator mechanic license categories? The following are the licensing categories for

qualified elevator mechanics or temporary elevator mechanics:

(1) **Category (01):** A general elevator mechanic license encompasses mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of all types of elevators and other conveyances in any location covered under chapter 70.87 RCW and this chapter.

(2) **Category (02):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of the following commercial and residential conveyances:

- ~~(a) Wheelchair lifts;~~
- ~~(b) Dumbwaiters; and~~
- ~~(c) Incline chairlifts.~~

Note: Work experience on residential conveyances in (a)(i), (ii), and (iii) of this subsection may not be applied toward the category (02) license requirements.)

Residential conveyances:

- (i) Wheelchair lifts;
- (ii) Dumbwaiters;
- (iii) Incline chairlifts; and
- (iv) Residential elevators;
- (b) Commercial conveyances:
- (i) Wheelchair lifts;
- (ii) Dumbwaiters; and
- (iii) Incline chairlifts.

(3) **Category (03):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of the following conveyances in industrial sites and grain terminals:

- (a) Electric and hand powered manlifts;
- (b) Special purpose elevators; and
- (c) Belt manlifts.

(4) **Category (04):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of the following conveyances:

- (a) Temporary personnel hoists;
- (b) Temporary material hoists; and
- (c) Special purpose elevators.

(5) **Category (05):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of material lifts.

(6) **Category (06):**

(a) This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of the following conveyances:

- (i) Residential wheelchair lifts;
- (ii) Residential dumbwaiters; and
- (iii) Residential incline chairlifts.

(b) Work experience on conveyances in (a)(i), (ii), and (iii) of this subsection may not be all inclusively applied toward the category (02) license requirements.

Note: Maintenance work performed by the owner or at the direction of the owner is exempted from licensing requirements provided that the owner resides in the residence at which the conveyance is located and the conveyance is not accessible

to the general public. Such exempt work does not count toward work experience for licensure.

(7) **Category (07):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of residential inclined elevators.

Note: Maintenance work performed by the owner or at the direction of the owner is exempted from licensing requirements provided that the owner resides in the residence at which the conveyance is located and the conveyance is not accessible to the general public. Such exempt work does not count toward work experience for licensure.

(8) **Category (08):** This license is limited to maintenance of all conveyances and is further limited to employees of public agencies to obtain and maintain the license. This work should not count towards other licenses.

(9) **Category (09):** This temporary license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, and repair of conveyances. This license is limited to individuals that are certified as qualified and competent by licensed elevator contractors. The individual must be an employee of the licensed elevator contractor. The contractor shall furnish acceptable proof of competency as the department may require. Each license must recite that it is valid for a period of thirty days from the date of issuance and for such particular elevators or geographical areas as the department may designate, and otherwise entitles the licensee to the rights and privileges of an elevator mechanic license issued under chapter 70.87 RCW and this chapter.

Note: See policy number 07-01.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00924 What procedures does the department follow when issuing a civil penalty for licensing violations? (1) If the department determines that an individual has violated the licensing requirements of chapter 70.87 RCW or this chapter, the department may issue a civil penalty describing the reasons for the violation(s). The department may issue a civil penalty to:

(a) A person who is advertising, offering to do work or submitting a bid to perform conveyance work, or employing elevator mechanics and does not have a valid elevator contractor's license as required under chapter 70.87 RCW or this chapter; or

(b) An individual who is working under chapter 70.87 RCW or this chapter and does not have a valid elevator mechanic license.

(2) A person may appeal a civil penalty issued under chapter 70.87 RCW or this chapter.

~~((3) The following enforcement schedule will be used for licenses issued under chapter 70.87 RCW and this chapter:~~

~~(a) July 1, 2004, through September 30, 2004. Any individual, firm, or company that is found in violation of the licensing~~

~~requirements will be notified of the violation and be allowed ten calendar days to make application with the department to avoid being issued a civil penalty. If the individual, firm, or company does not make application within ten calendar days they will be issued a civil penalty.~~

~~(b) On or after October 1, 2004. Any individual, firm, or company that is found in violation of the licensing requirements may be issued a civil penalty.))~~

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00926 What are the civil (monetary) penalties for violating the licensing requirements of chapter 70.87 RCW or this chapter? (1) A person cited for a violation under chapter 70.87 RCW or this chapter may be assessed a civil (monetary) penalty based upon the following schedule:

First Violation	\$500.00
Each additional Violation	\$500.00

(2) Each day a person, firm or company is in violation may be considered a separate violation.

(3) Each job site at which a person is in violation may be considered a separate violation.

(4) The department must serve notice by certified mail to a person for a violation of chapter 70.87 RCW or this chapter. A violation will be considered served on the date it is mailed to his or her last known address on record with the department.

PART B-1 - ((REGULATIONS AND FEES FOR ALL ELEVATORS, DUMBWAITERS, ESCALATORS AND OTHER CONVEYANCES)) PERMIT REGULATIONS AND FEES, PENALTIES AND INSPECTION TYPES FOR ALL CONVEYANCES

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-01000 What is the permit process for conveyances? (1) Prior ~~((to the start of the construction, alteration, or~~

~~relocation of all conveyances (this includes both private residence and commercial conveyances) plans must be submitted to and approved by the department. See WAC 296-96-01030.~~

~~(2) Prior to construction, alteration, or relocation of any conveyance, you must get an installation permit from the department. See WAC 296-96-01010 through 296-96-01025.~~

~~(3) Your conveyance must be inspected upon completion of the construction, alteration, or relocation. See WAC 296-96-01035.~~

~~(4) You must obtain and renew an annual operating permit for each conveyance that you own, except for residential conveyances. See WAC 296-96-01065.~~

~~(5) After initial purchase and inspection private residence conveyance(s) do not require an annual permit. However, annual inspections may be conducted upon request. See WAC 296-96-01065 for the associated fees)) to construction, alteration, or relocation of any conveyance, the licensed elevator contractor shall:~~

~~(a) Submit an installation application to the department. See WAC 296-96-01010 through 296-96-01025.~~

~~(b) Plans must be submitted to and approved by the department. See WAC 296-96-01030.~~

EXCEPTION: Most alterations will not require plans.

~~(c) Post an approved permit from the department on the job site.~~

~~(d) Obtain and pass an inspection prior to placing the conveyance in service. See WAC 296-96-01035.~~

~~(2) The owner must obtain and renew an annual operating certificate for each conveyance that they own, except for residential conveyances. See WAC 296-96-01065.~~

~~(3) After initial purchase and inspection, private residence conveyance(s) do not require an annual operating certificate. However, annual inspections may be conducted upon request. See WAC 296-96-01045 for the permit process.~~

AMENDATORY SECTION (Amending WSR 07-11-128, filed 5/22/07, effective 6/30/07)

WAC 296-96-01005 When do I need and what are the steps in obtaining a permit? ~~(1) ((You must obtain a permit from the department before you begin constructing, altering or relocating any conveyance. To obtain your permit, you need to complete the permit application and pay the appropriate fee. Once your application is approved, a permit will be issued and you may begin work on your project.)) See WAC 296-96-01000 for the permit process.~~

~~(2) Construction and alteration permits are valid for one year from the date of issue. However, permits may be renewed if you:~~

~~(a) Apply for a renewal permit before your current permit~~

expires;

(b) The department approves your request for a renewal permit;
and

(c) You pay a \$51.60 renewal fee to the department for each permit you renew;

(3) If your permit has expired you must reapply for a new permit.

(4) ~~((You are not required to obtain permits and pay fees for repairs and replacement associated with normal functions and necessary maintenance done with parts of equivalent materials, strength and design; or for any conveyance exempted by RCW 70.87.200.))~~ See WAC 296-96-01006 for work requiring a permit.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-01006 What type of conveyance work requires permitting and inspection? (1) All installations and relocation of conveyances requires permitting and inspection. All conveyance work must be performed by an elevator mechanic licensed to perform work in the appropriate category. (See WAC 296-96-00910).

(2) All alterations ~~((and other conveyance work))~~ require ~~((s))~~ permitting ~~((and))~~, inspection, and must include ~~((s))~~ but ~~((is))~~ are not limited to:

(a) Items identified in ASME A17.1.

(b) Any conveyance work that requires the conveyance to be tested prior to being returned to service, including:

(i) The replacement or repair of any parts, the installation of which would require recalibration or testing (e.g., brakes, hydraulic valves and piping, safeties, door reopening devices, governors, communication systems, cab interiors, car/hall buttons, etc.); or

(ii) Work performed on components or equipment affecting or necessary for fire and life safety (e.g., cab interiors, systems associated with fire recall, etc.).

(3) Permits and fees are not required for normal function and necessary maintenance and repair performed with parts of equivalent materials, strength, and design or for any conveyance exempted by RCW 70.87.200.

Contact the department if you have any questions or need assistance determining if a permit and inspection are required.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-01009 Who can purchase a permit? The department may only issue a permit for conveyance work to a licensed elevator contractor.

Permits are only required for alterations, relocations and installations. ((Beginning with the effective date of these rules, the homeowner will no longer be allowed to purchase a permit.))

AMENDATORY SECTION (Amending WSR 07-11-128, filed 5/22/07, effective 6/30/07)

WAC 296-96-01010 What are the installation permit fees for conveyances, material lifts, and hoists and how are they calculated? Installation permit fees are based on the total cost of the conveyance and the labor to install the conveyance. The following permit fees apply to the construction or relocation of all conveyances and material lifts:

TOTAL COST OF CONVEYANCE	FEE
\$0 to and including \$1,000	\$54.60
\$1,001 to and including \$5,000	\$81.90
\$5,001 to and including \$7,000	\$136.70
\$7,001 to and including \$10,000	\$164.10
\$10,001 to and including \$15,000	\$218.90
OVER \$15,000	\$306.50
	plus
Each additional \$1,000 or fraction thereof	\$7.60

AMENDATORY SECTION (Amending WSR 07-11-128, filed 5/22/07, effective 6/30/07)

WAC 296-96-01012 What are the permit fees for alterations to conveyances, material lifts, and hoists and how are they calculated? Permit fees are based on the total cost of the equipment, materials and labor to perform the alteration. The following permit fees apply to the alteration of all conveyances and material lifts:

TOTAL COST OF ALTERATION	FEE
\$0 to and including \$1,000	\$54.60
\$1,001 to and including \$5,000	\$81.90
\$5,001 to and including \$7,000	\$136.70
\$7,001 to and including \$10,000	\$164.10

TOTAL COST OF ALTERATION	FEE
\$10,001 to and including \$15,000	\$218.90
OVER \$15,000	\$218.90
Each additional \$1,000 or fraction thereof	\$7.60

AMENDATORY SECTION (Amending WSR 02-12-022, filed 5/28/02, effective 6/28/02)

WAC 296-96-01025 What is the permit fee for personnel and material hoists? The fee for each personnel hoist or material hoist installation is \$((200.00)) 218.90
See WAC 296-96-01035(2) for requirements for jumps.

Note: An operating ((permit)) certificate is also required for these types of conveyances.

AMENDATORY SECTION (Amending WSR 07-11-128, filed 5/22/07, effective 6/30/07)

WAC 296-96-01027 Are initial installation permit fees refundable? Your initial installation permit fees are refundable if the installation work has not been performed, minus a processing fee, unless your permits have expired. No refunds will be issued for expired permits. All requests for refunds must be submitted in writing to the elevator section and must identify the specific permits and the reasons for which the refunds are requested.

The processing fee for each refund is \$32.70

AMENDATORY SECTION (Amending WSR 07-11-128, filed 5/22/07, effective 6/30/07)

WAC 296-96-01030 What is the process for installation and alteration plan approval? Prior to the start of construction, ((you)) the applicant must submit to the department for approval two copies of plans for new installations or major alterations. To be approved, the plan must comply with the latest adopted edition of the American Society of Mechanical Engineers (ASME), the National Electrical Code (NEC) and applicable Washington Administrative Codes (WAC). In addition, the plans must include all information necessary in determining whether each

installation/alteration complies with all applicable codes. ((You)) The permit holder must keep a copy of the approved plan on the job site until the department has witnessed all acceptance tests. Any alterations to the approved plan must be submitted to the department for approval before a final inspection will be conducted. The nonrefundable fees for reviewing your plans are:

For each installation/major alteration \$27.20
If more than two sets of plans are submitted, the fee for each additional set \$10.80

AMENDATORY SECTION (Amending WSR 07-11-128, filed 5/22/07, effective 6/30/07)

WAC 296-96-01035 Are there inspection fees? Yes. The initial inspection(s) of a conveyance or for the initial inspection of construction, alteration or relocation of a conveyance is included with your permit fee. Once the department has approved the initial installation of the conveyance you will be issued a temporary operating ((permit)) certificate that is valid for 30 days. Prior to the expiration of the 30-day ((permit)) temporary operating certificate the application for an annual operating ((permit)) certificate and the appropriate fees must be paid to the department. Once the department has received the appropriate fees and application ((you)) the owner will be issued ((your)) the first annual operating ((permit)) certificate. ((You are)) The owner or owners' representative will receive an invoice from the department for renewal. The owner is required to renew ((your)) the annual operating ((permit)) certificate yearly.

The following inspections require an additional inspection fee:

(1) **Reinspection.** If a conveyance does not pass an initial inspection and an additional inspection is required, the fee for each reinspection of a conveyance is \$109.40 per conveyance plus \$53.10 per hour for each hour in addition to the first hour.

The department may waive reinspection fees.

(2) **Inspecting increases in the height (jumping) of personnel and material hoists.**

The fee for inspecting an increase in the height (jumping) of each personnel hoist or material hoist is \$109.40 plus \$54.60 per hour for each hour in addition to 2 hours. This fee is for inspections occurring during regular working hours.

The permit holder may be allowed to operate a hoist prior to the jump inspection if:

(a) The electrical limits will not allow the lift to operate above the previously inspected landing.

(b) The state elevator inspector is contacted, agrees and can schedule within 3 days.

(3) **Variance inspections.**

(a) The fee for an on-site variance inspection is \$164.10 per conveyance plus \$54.60 per hour for each hour in addition to 2 hours. This fee is for inspections occurring during regular working hours.

(b) The fee for a variance that does not require an on-site inspection is \$54.60 per conveyance. The individual requesting the variance must provide the department with pictures, documentation, or other information necessary for the department to review the variance. The department may conduct an on-site variance inspection to verify the information provided or if it determines that an inspection is necessary. If an on-site variance inspection is performed, the fees in (a) of this subsection will apply.

(4) **"Red tag" status fee.** The annual fee for a conveyance in "Red tag" status is \$27.20.

Note: You must provide the department with written approval from the building official, indicating that the conveyance is not required for building occupancy, when you apply to have the conveyance placed in voluntary red tag status.

(5) **Decommission inspection.** The fee for performing a decommission inspection is \$54.60. Once the decommission inspection has been performed and approved, the conveyance will no longer require annual inspections until such time that the conveyance is brought back into service. Prior to operating the conveyance, a new inspection and annual operating permit must be obtained.

(6) **Voluntary inspections by request.** The owner or potential purchaser of a building within the department's jurisdiction may request a voluntary inspection of a conveyance. The fee for this inspection will be \$109.40 per conveyance and \$54.60 per hour for each hour in addition to 2 hours plus the standard per diem and mileage allowance granted to department inspectors. The owner/potential purchaser requesting the voluntary inspection will not be subject to any penalties based on the inspector's findings.

AMENDATORY SECTION (Amending WSR 07-11-128, filed 5/22/07, effective 6/30/07)

WAC 296-96-01045 What are the inspection requirements and fees for conveyances in private residences? (1) Chapter 70.87 RCW requires the department to inspect all new, altered or relocated conveyances operated exclusively for single-family use in private residences. Prior to ((inspection, you)) installation, a licensed elevator contractor must complete a permit application as described in WAC 296-96-01005 and pay the appropriate fee listed in WAC 296-96-01010.

(2) Chapter 70.87 RCW allows the department to inspect conveyances operated exclusively for single-family use in private residences when the department is investigating an accident or an alleged or apparent violation of the statute or these rules.

(3) No annual inspection and operating ((permit)) certificate

is required for a private residence conveyance operated exclusively for single-family use unless the owner requests it. When an owner requests an inspection and an annual operating ((~~permit~~)) certificate, the following fee must be paid prior to an inspection:

TYPE OF CONVEYANCE	FEE
Each inclined stairway chair lift in private residence	\$25.50
Each inclined wheel chair lift in a private residence	<u>\$25.50</u>
Each vertical wheel chair lift in a private residence	<u>\$32.20</u>
Each dumbwaiter in a private residence	<u>\$25.50</u>
Each inclined elevator at a private residence ...	<u>\$91.00</u>
Each private residence elevator	<u>\$58.60</u>
Duplication of a lost, damaged or stolen operating permit	<u>\$10.80</u>

NEW SECTION

WAC 296-96-01057 Does the department charge a fee to perform investigations and what is the fee? An elevator inspector may charge at a rate of \$65.50 per hour (including travel time) plus the standard per diem and mileage allowance granted to department inspectors. These services shall include accident investigation relating to any and all accidents. This fee would include an inspection as required during the accident investigation.

AMENDATORY SECTION (Amending WSR 07-11-128, filed 5/22/07, effective 6/30/07)

WAC 296-96-01065 What are the annual operating ((~~permits~~)) certificate fees? An annual operating ((~~permit~~)) certificate will be issued to you upon payment of the appropriate fee((~~+~~)). The owner of record will be invoiced by the department. If a change of owner has occurred, it is the new owner's responsibility to ensure the department has the corrected information. Below is the fee structure table:

TYPE OF CONVEYANCE	FEE
Each hydraulic elevator	\$109.40
Each roped-hydraulic elevator	<u>\$136.70</u>

plus for each hoistway opening in excess of two	\$10.80
Each cable elevator	\$136.70
plus for each hoistway opening in excess of two	\$10.80
Each cable elevator traveling more than 25 feet without an opening--for each 25 foot traveled	\$10.80
Each limited-use/limited-application (--LULA) elevator	\$109.40
Each escalator	\$ 90.90
Each dumbwaiter in other than a private residence	\$58.60
Each material lift	\$109.40
Each incline elevator in other than a private residence	\$117.60
Each belt manlift	\$109.40
Each stair lift in other than a private residence	\$58.60
Each wheel chair lift in other than a private residence	\$58.60
Each personnel hoist	\$109.40
Each grain elevator personnel lift	\$90.90
Each material hoist	\$109.40
Each special purpose elevator	\$109.40
Each private residence elevator installed in other than a private residence	\$109.40
Each casket lift	\$90.90
Each sidewalk freight elevator	\$90.90
Each hand-powered manlift or freight elevator	\$61.60
Each boat launching elevator	\$90.90
Each auto parking elevator	\$90.90
Each moving walk	\$90.90
Duplication of a damaged, lost or stolen operating permit	\$10.80

AMENDATORY SECTION (Amending WSR 07-11-128, filed 5/22/07, effective 6/30/07)

WAC 296-96-01070 What are the civil (monetary) penalties for violating the conveyance permit and operation requirements of chapter 70.87 RCW and this chapter? (1) Any licensee, installer, owner or operator of a conveyance who violates a provision of

chapter 70.87 RCW or this chapter shall be subject to the following civil penalties:

- (a) Operation of a conveyance without a permit:
 - First violation \$164.10
 - Second violation \$328.40
 - Each additional violation \$500.00
- (b) Installation of a conveyance without a permit:
 - First violation \$164.10
 - Second violation \$328.40
 - Each additional violation \$500.00
- (c) Relocation of a conveyance without a permit:
 - First violation \$164.10
 - Second violation \$328.40
 - Each additional violation \$500.00
- (d) Alteration of a conveyance without a permit:
 - First violation \$164.10
 - Second violation \$328.40
 - Each additional violation \$500.00
- (e) (i) Operation of a conveyance for which the department has issued a red tag or has revoked or suspended an operating permit or operation of a decommissioned elevator \$500.00
(ii) Removal of a red tag from a conveyance \$500.00
- (f) Failure to comply with a correction notice:
 - ~~((Within))~~ After 90 days \$109.40
 - ~~((Between 91 and))~~ After 180 days \$273.60
 - ~~((Between 181 and))~~ After 270 days \$438.00
 - ~~((Between 271 and))~~ After 360 days \$500.00
 - Each 30 days after 360 days \$500.00
 - Note: Penalties are cumulative
- (g) Failure to submit official written notification that all corrections have been completed:
 - ~~((Within))~~ After 90 days \$109.40
 - ~~((Between 91 and))~~ After 180 days \$273.60
 - ~~((Between 181 and))~~ After 270 days \$438.00
 - ~~((Between 271 and))~~ After 360 days \$500.00
 - Each 30 days after 360 days \$500.00
 - Note: Penalties are cumulative

- (h) Failure to notify the department of each accident to a person requiring the services of a physician or resulting in a disability exceeding one day may result in a \$500.00 penalty per day. The conveyance must be removed from service until the department authorizes the operation of the conveyance. This may require an inspection and the applicable fees will be applied. Failure to remove the conveyance from service may result in an additional \$500.00 penalty per day. \$500.00
Plus WAC
296-96-
01057
- (i) Falsifying official written documentation submitted to the department. Each day is a separate violation. \$500.00

(2) A violation as described in subsection (1)(a), (b), (c), and (d) of this section will be a "second" or "additional" violation only if it occurs within one year of the first violation.

(3) The department must serve notice by certified mail to an installer, licensee, owner, or operator for a violation of chapter 70.87 RCW, or this chapter.

PART C - REGULATIONS FOR NEW AND ALTERED ELEVATORS AND LIFTING DEVICES

NOTE: The following rules set the minimum standard for all new installations and, where applicable, alterations.

NOTE: Part C is not intended to replace the current adopted standards outlined in WAC 296-96-00650. In conflicts between Part C and the adopted standards, Part C will take precedent.

NEW SECTION

WAC 296-96-02400 When must the department be notified for a new or altered inspection? (1) The person or firm installing, relocating, or altering a conveyance shall notify the department in writing, at least seven days before requesting any inspection of the work, and shall subject the new, moved, or altered portions of the conveyance to the acceptance tests.

(2) The department may grant exceptions to this notice requirement.

NEW SECTION

WAC 296-96-02405 What is the inspection and approval process for alterations? The following process must be followed when performing alterations:

(1) Obtain an alteration permit from the department prior to performing the alteration. The permit application must include detailed information on the scope of the alteration.

(2) Take the conveyance out-of-service and perform the alteration.

(3)(a) If the conveyance requires an inspection prior to being returned to service (as identified on the alteration permit), you must contact the department to perform an inspection and:

(i) If the conveyance passes the inspection, the conveyance may be placed back into service.

(ii) If the conveyance fails the inspection, the conveyance must remain out-of-service until the corrections are made and approved by the department.

(b) If the conveyance is not required to be inspected prior to being returned to service, you must contact the department to perform an inspection and:

(i) If the conveyance passes the inspection, the conveyance may remain in service.

(ii) If the conveyance fails the inspection, the conveyance will be placed out-of-service until the corrections are made and approved by the department.

NEW SECTION

WAC 296-96-02410 Are there additional work requirements when performing an alteration? For certain types of alterations additional work may be required as part of the alteration and prior to approval of the conveyance. These alterations include, but are not limited to:

(1) Replacements of controllers will require the following:

(a) Fire fighter service requirements must be met in accordance with the most recent code adopted by the department.

(b) Seismic requirements ("Derailment and/or seismic switch as required") must be met in accordance with the most recent code adopted by the department. In addition, the car must operate according to A17.1 seismic requirements.

(c) Lighting in the machine room and pit must comply with the most recent code adopted by the department.

(d) Electrical outlets in the machine room and pit must be of the ground fault interrupter type.

(2) Replacement of controllers and a car operating panel and/or hall fixtures:

(a) The requirements of subsection (1) of this section must be

met.

(b) All panels and fixtures must meet the applicable (e.g., height, sound, Braille, etc.) requirements in accordance with this chapter.

(3) Replacement of door operators and/or door equipment: Any changes to these items require the installation of door restrictors.

(4) Hydraulic piping: Replacement or relocation of hydraulic piping will require the installation of a rupture (overspeed) valve.

Note: The department may grant exceptions to the requirements identified in this section.

NEW SECTION

WAC 296-96-02415 What are the conditions for obtaining a temporary construction operating permit?

Note: See WAC 296-96-01040 for fees.

(1) In order to obtain a permit: The elevator must at a minimum adhere to:

(a) ASME A17-1 Section 5.10 Elevators Used for Construction.

(b) A single means of disconnecting the elevator must be provided and related equipment must be identified by the use of numbers or letters on the disconnect, the controller, the drive machine, the cross head, and the car operating panel.

(c) The key operation of Phase I must recall the elevator.

(d) A means of emergency communication with the elevator must be provided. If there is no permanent method of emergency communication an operator with communication equipment must be provided.

(e) Tests shall be conducted according to A17.1-8.10.5.10 Elevators Used for Construction.

(f) Hydraulic elevators with less than four stops may not be issued a temporary construction operating permit unless preapproved by the department.

(g) Elevator cab interiors must be completed. Temporary cabs may be used and walls must be covered with fire retardant materials.

(h) The elevator must pass load tests and safety circuit inspections.

(i) Temporary or permanent lights in the cab, machine room and at the landings must be provided.

(j) Machine rooms must be fully enclosed and have a lockable door.

(k) Hoistways must be fully enclosed.

(l) The elevator is for construction use only. Office furniture and goods used to stock the building are not to be

considered construction work.

(2) The person operating the permitted conveyance under this section must be properly trained in operation and safety and:

(a) The operator, which may be one of your employees, must be on the elevator whenever it is in use.

(b) The operator must be designated to be the sole operator of the elevator.

(c) The operator must be trained in the proper operation of the elevator, the proper procedure to handle an emergency and must know who to contact in the event of an emergency involving the operation of the elevator.

(d) The operator must carry a means of two-way communication on his/her person at all times. (This may be in the form of a cellphone, walkie-talkie, etc., providing proper reception is obtainable at all times.)

NEW SECTION

WAC 296-96-02420 What are the requirements for temporary construction operating permits? (1) A thirty-day temporary construction operating permit is for transportation of construction personnel and materials only, not for the transportation by the general public.

(2) Temporary construction operating permits are valid for thirty days.

(3) You must contact the department for a reinspection to renew the permit.

(4) All elevators with expired temporary construction operating permits that have not passed a final inspection may not be operated. Operating an elevator with an expired permit shall result in a civil penalty (see WAC 296-96-01070 (1)(a)).

(5) Renewal of a temporary operating permit is at the discretion of the department.

NEW SECTION

WAC 296-96-02425 Where is a shut-off valve required for hydraulic elevators? Two shut-off valves may be required.

(1) ASME requires that a shut-off valve be installed in the machine room.

(2) When the pit is lower than the machine, a shut-off valve must be installed in the pit.

(3) A separate shut-off valve is not required in the pit for hydraulic elevators equipped with a safety/rupture valve that

rotates no more than 180 degrees to stop the flow of hydraulic fluid and has a safety shut-off handle capable of being grasped.

EXCEPTION: Limited use/limited application (LULA), special purpose and residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02450 Can pipes and ducts be installed above a machine room? Electric conduit and ducts may be installed in the upper space ("upper space" is defined as the space above the fire-rated ceiling) of the elevator machine room as long as they are installed above the required seven-foot clearance and they do not interfere with the elevator equipment which also must be installed to allow a seven-foot clear head room.

(1) Straight through runs of electrical conduit without junction boxes can be installed in this space.

(2) Pipes and ducts conveying gases, vapor, or liquids may be installed in the space above the machine room provided they are encased in a noncombustible secondary pipe without joints, or a moisture barrier without penetration.

EXCEPTION: Residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02455 What is the minimum working space required in machine rooms? (1) In machine rooms with equipment requiring maintenance and inspection, an eighteen-inch working space must be established.

(2) There must be a minimum of eighteen inches working space (other than the required controller panel clearances) on one of the four sides of the hydraulic tank.

(3) The requirements in subsections (1) and (2) of this section do not supersede NFPA 70.

(4) The side with the hydraulic outlet pipe is not considered usable working space.

NEW SECTION

WAC 296-96-02460 What are the requirements for electrical main line disconnects? (1) The main line disconnect switch(es) or circuit breaker must be located inside the machine room door on the lock jamb side of the machine room door and not more than twenty-four inches from the jamb to the operating handle; and it must be at a height of not more than sixty-six inches above the finish floor.

(2) For multicar machine rooms the switches shall be grouped together as close as possible to that location.

(3) For machine rooms with double swing doors, the doors must swing out and the switch(es) must be on the wall adjacent to the hinge side of the active door panel.

(4) The switch(es) must be designed so that they may be locked out and tagged in the open position.

EXCEPTION: Special purpose and residential inclined elevators are exempt from this section.

NEW SECTION

WAC 296-96-02465 What are the requirements associated with elevator machine rooms? (1) Panels or doors for the purpose of accessing nonelevator equipment are not permitted in elevator machine rooms. Passage through the machine room may not be used to gain access to other parts of the building that do not contain elevator equipment.

(2) The lighting control switch must be located inside the machine room within twenty-four inches of the lock jamb side of the machine room door.

(3) Cooling or venting of the elevator machine room shall be to the present building code adopted by the state.

Machinery spaces, machine rooms, control spaces, and control rooms that contain solid-state equipment for elevator operation shall be provided with an independent ventilation or air-conditioning system to protect against the overheating of the electrical equipment. Ventilation systems shall use outdoor makeup air. The system shall service the equipment space only, and shall be capable of maintaining the temperature and humidity within the range established by the manufacturer's specifications. Where no manufacturer specifications are available, the equipment space temperature shall be maintained at no less than fifty-five degrees Fahrenheit and no more than ninety degrees Fahrenheit.

The cooling load for the equipment shall include the BTU output of the elevator operation equipment as specified by the manufacturer based on one hour of continuous operation. The outdoor design temperature for ventilation shall be from the 0.5 percent column for summer from the Puget Sound Chapter of ASHRAE

publication "*Recommended Outdoor Design Temperatures, Washington State.*" The following formula shall be used to calculate flow rate for ventilation:

CFM = BTU output of elevator machine room equipment/[1.08 x (acceptable machine room temp - makeup air temp from the ASHRAE publication)]

EXCEPTION: For buildings four stories or less, natural or mechanical means may be used in lieu of an independent ventilation or air-conditioning system to keep the equipment space ambient air temperature and humidity in the range specified by the elevator equipment manufacturer.

(4) A thermostat must be provided in the elevator machine room to control the temperature.

(5) Where no specifications are available, the machine room temperature shall be maintained at no less than fifty-five degrees Fahrenheit and no more than one hundred degrees Fahrenheit.

(6) When standby power is connected to the elevators, the machine room ventilation or air conditioning system shall be connected to the standby power.

(7) If the air conditioner is mounted overhead, seven feet of headroom clearance must be provided from the underside of the unit to the machine room floor.

(8) If ventilation is used, it must not exhaust air into other parts of the building.

(9) Machine rooms located in underground parking garages must have a means to exchange the air in the machine room. An "exchange of air" is completed through separate intake and exhaust systems.

EXCEPTION: The air in an underground parking garage machine room can be exchanged directly into the parking garage area.

(10) All elevators that are provided with remote elevator machine and/or control rooms must be provided with a permanent means of communication between the elevator car and the remote machine room and/or control room.

(11) Elevator machine room doors must have signs with lettering at least 1.25 inch in height with "elevator equipment room authorized personnel only - no storage."

EXCEPTION: Residential conveyances, LULAs and special purpose elevators are exempted from these requirements.

FIRE SERVICE, SPRINKLERS, SPRINKLER PIPES, SHUNT TRIP

NEW SECTION

WAC 296-96-02470 What are the requirements for Fireman's Service Phase I and Phase II recall? Devices for deactivating recall must be in the line of sight of the elevator; be secure from

tampering; and must be accessible to fire, inspection, and elevator service personnel only. Owner-designated patient express and emergency hospital service elevators may have a manual control in the car for use by authorized patient care personnel. When activated, it shall preclude Phase I recall.

The illuminated visual signal in the car that indicates when Phase I Emergency Recall Operation is in effect must stay illuminated until the car is taken off Phase I operation.

Once the car returns to the designated landing on Phase I recall and the doors have reached their full open position, the buzzer must be silenced within ten seconds.

Groups of elevators containing four or more cars shall be provided with two, three-position key switches per group. For purposes of this section, a group shall be defined as all elevators serving the same portion of a building. Hall call buttons common to a group will remain in service unless both Phase I recall switches of a four car or larger group are placed in the recall mode or a fire alarm recall signal is initiated.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02475 What are the requirements for sprinklers in hoistways and machine rooms? (1) The machine room sprinkler piping must terminate in the machine room. The sprinkler piping must not run through the machine room to other spaces.

(2) The hoistway must not be used to supply sprinkler piping to more than one floor.

(3) The pit will be considered as a floor level.

(4) Sprinkler heads at the top of the shaft must terminate in the shaft. The sprinkler must not run through the hoistway to other spaces. ("Other spaces" includes the machine room.)

(5) All risers and returns must be located outside of the hoistway and machine room.

(6) See requirements in ASME A17.1.

(7) If a sprinkler system is added to an existing installation, the conveyance will be required to:

(a) Install shunt trip per WAC 296-96-02277.

(b) If the conveyance was permitted to install on or after 1/1/1989 (A17.1-1987 code), then the fire service must operate to the code enforced per the original installation permit. A controller alteration will require fire and sprinkler system installation to the current adopted code.

(c) If the permit is prior to 12/31/1988, the fire service shall operate per current adopted standard in effect at the time of the alteration permit. (See A17.1-2.27.3.)

NEW SECTION

WAC 296-96-02480 How does the department enforce ASME requirements for sprinklers, smoke detectors, and heat detectors in hoistways and machine rooms? ASME A17.1-2.8.2.3.2 states: "Means shall be provided to automatically disconnect the mainline power supply to the affected elevator upon or prior to the application of water from sprinklers located in the machine room or in the hoistway more than 600 mm (24 inches) above the pit floor. This means shall be independent of the elevator control and shall not be self-resetting. The activation of sprinklers outside the hoistway or machine room shall not disconnect the main line power supply." This section applies to both new and altered elevators when sprinklers have been installed in the elevator machine room and/or hoistway.

(1) The department enforces this rule as follows:

(a) When sprinkler systems are installed in an elevator hoistway, fixed temperature heat detectors set only at one hundred thirty-five degrees Fahrenheit must be located at the top of the hoistway. If sprinklers are installed in the machine room, the same rule applies to heat detectors in the machine room. If heat detectors are installed, they must be no more than eighteen inches from the sprinkler and in accordance with NFPA must also be installed for elevator recall. The purpose of the heat detector is to automatically disconnect mainline power to the elevator before water flows from any sprinkler associated with the elevator system.

(b) Activation of a smoke detector or other department approved initiating device at the top of the hoistway shall cause all elevators having any equipment in that hoistway, and any associated elevators of a group automatic operation, to be returned nonstop to the designated level.

(c) Heat detectors must be:

(i) Located within eighteen inches of each sprinkler head, as required by the local building official, or as required by NFPA 13.

(ii) Ceiling mounted. However, pit detectors, if installed, may only be used as a signaling device and wall-mounted if they are so designed.

(iii) Heat detectors are not required in pits provided the automatic sprinkler heads are installed in such a way that the water spray pattern does not spray higher than three feet above the pit floor with a spray pattern directed level and down.

(d) The shunt trip disconnect must be installed in the machine room or machinery space and it must be easily identifiable.

(e) Power for the automatic disconnect control circuit.

(i) Must be derived from a one hundred twenty volt separate branch circuit. Circuit location must be identified on or next to the elevator disconnects; and

(ii) An illuminated visual device must be installed in the machine room adjacent to each elevator's disconnect. The purpose of this visual device is to indicate that power is available to the shunt trip activation mechanism; or

(iii) The department will allow disconnects that are labeled

and listed to have built-in circuits that transform the power for the shunt trip device. This must be a one hundred twenty volt supply to the device. The shunt trip device must initiate shunt trip of the main line, not the fire panel. There must be an illuminated visual device incorporated on the disconnect switch that identifies that power is available to the shunt trip device.

(f) All electrical equipment and wiring associated with shunt trip devices must conform to the applicable ANSI/NFPA 70.

(g) The department does not require sprinkler shut-off valves. However, where they are installed, they must be located in an accessible place outside the hoistway, machine room or machinery space with their handles placed at no more than six feet above the floor.

(h) Emergency return units must be disabled when the shunt trip is activated.

(2) Alternative methods used to achieve ASME A17.1-2.8.2.3.2 must be approved by the department prior to installation.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

CAR(S)

NEW SECTION

WAC 296-96-02485 What is required for emergency escape hatches? Emergency escape hatches must be hinged and secured from the car top so that the cover opens from the top of the car only. The hatch must be able to be opened without the use of tools.

EXCEPTION: Machine roomless elevators are exempt from this requirement. They must be locked from inside the car and provide the key in the elevator lock box.

NEW SECTION

WAC 296-96-02490 Are there exceptions for correction facility elevators? Facilities that require special consideration to ensure the safety of security personnel and to prevent escapes must meet the relevant requirements of ASME A17.1, except that accessible "in-car" stop switches and signaling devices are not required when the elevator operation is:

- (1) Continually monitored by audio-visual equipment.
- (2) Remotely controlled from a single location.
- (3) Controls necessary for an elevator's operation may be located inside a car when the operating panel has a locked cover.

NEW SECTION

WAC 296-96-02495 Are self-leveling devices required? Automatic elevators must be equipped with a self-leveling device. Each car shall be equipped with a self-leveling feature that will automatically bring and maintain the car at floor landings within a tolerance of one-half inch (13 mm) under rated loading to zero loading conditions.

NEW SECTION

WAC 296-96-02500 Is a door reopening device required on automatic-closing car doors? Elevator doors shall be provided with a reopening device that shall stop and reopen a car door and hoistway door automatically if the door becomes obstructed by an object or person.

The reopening device shall be activated by sensing an obstruction passing through the opening at five inches (125 mm) nominal and twenty-nine inches (735 mm) nominal above the floor.

The reopening device shall not require physical contact to be activated, although contact shall be permitted before the door reverses.

The reopening device shall remain effective for twenty seconds minimum.

EXCEPTION: Special purpose and residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02505 What is the minimum acceptable initial transfer time for an elevator door? The minimum acceptable time from notification that a car is answering a call until the doors of that car start to close shall be calculated from the following equation:

$T = D(1.5 \text{ ft/s})$ or $T = D/(455 \text{ mm}) = 5 \text{ seconds minimum, where}$

T equals the total time in seconds and D equals the distance (in feet or millimeters) from the point in the lobby or corridor 60 inches (1525 mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door.

EXCEPTION: For car with in car lanterns, T shall be permitted to begin when the signal is visible from the point sixty inches directly in front of the furthest hall call button and the audible signal is sounded.

Elevator doors shall remain fully open in response to a car call for three seconds minimum.

EXCEPTION: Special purpose and residential elevators are exempt.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02510 What are the minimum cab size and other applicable requirements for car interiors? (1) All car interiors must be constructed to allow wheelchair users to enter the car, to maneuver within reach of the control panel and to exit the car.

(2) Minimum door width must be thirty-six inches.

(3) Minimum cab depth:

(a) From the rear wall to the return panel must be fifty-one inches; and

(b) From the rear wall to the inside face of the cab door must be fifty-four inches.

(4) For cabs with side-opening doors, the minimum cab width is sixty-eight inches;

(5) For cabs with center-opening doors, the minimum cab width is eighty inches;

(6) Maximum clearance between a car platform sill and the edge of a hoistway landing sill must be 1-1/4 inch; and

(7) If the building official having jurisdiction determines the elevator must comply with accessibility requirements, the elevator must comply with subsections (1) through (6) of this section.

Note: See IBC for stretcher requirements for building four stories or more. Written prior approval from the local building/fire official must be obtained to reduce these requirements.

EXCEPTION: Elevators located in existing school buildings or other buildings specifically identified by local authorities may have a minimum clear distance between walls or between a wall and the door, including the return panel, of 54 inches, and a minimum distance from the wall to the return panel of 51 inches.

EXCEPTION: LULA, special purpose, and residential elevators must meet the specifications in ASME A17.1 pertaining to car size.

NEW SECTION

WAC 296-96-02515 What is required for car controls? (1) Car controls shall be located within one of the reach ranges specified in ANSI 117.1 section 308.

EXCEPTION: Where the elevator panel serves more than sixteen openings and a parallel approach to the controls is provided, buttons with floor designations shall be permitted to be fifty-four inches maximum above the floor.

(2) Elevator car call sequential step scanning shall be provided where car control buttons are provided more than forty-eight inches above the floor.

(3) Floor selection shall be accomplished by applying momentary or constant pressure to the up or down scan button. The up scan button shall sequentially select floors above the current floor. The down scan button shall sequentially select floors above the current floor. When pressure is removed from the up and down scan button for more than two seconds, the last floor selected shall be registered as a car call. The up and down scan button shall be located adjacent to or immediately above the emergency control buttons. (new requirement)

(4) Car control buttons with floor designations shall be raised or flush.

(5) Buttons shall be three-fourth inch minimum in their smallest dimension.

(6) Buttons shall be arranged with numbers in ascending order. When two or more columns of buttons are provided they shall read from left to right.

(7) Control buttons shall be identified by tactile characters complying with ANSI 117.1 section 703.

(8) Tactile characters and Braille designations shall be placed immediately to the left of the control button to which the designations apply.

(9) Car control keypads shall be a standard telephone keypad arrangement.

(10) Keypads shall be identified by visual characters complying with ANSI A117.1 and shall be centered on the keypad button. The number five key shall have a single raised dot.

(11) The dot shall have a base diameter of 0.188 inch minimum to 0.120 inch maximum, and a height of 0.025 inch minimum and 0.037 inch maximum.

(12) Emergency controls shall have their centerlines thirty-five inches minimum above the floor.

(13) Emergency controls including the emergency alarm shall be grouped at the bottom of the panel.

(14) The control buttons for emergency stop, alarm, door open, door close, main entry floor, and phone shall be tactile symbols. Per ANSI table 407.4.7.1.3.

(15) Buttons with floor designations shall be provided with visible indicators to show that a call has been registered. The visible indicator shall extinguish when the car arrives at the designated floor.

EXCEPTION: Special purpose and residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02520 What are the location and operation requirements for car position indicators in the car? (1) Audible and visible car position indicators shall be provided in elevator cars. Visible indicator characters shall be one-half inch minimum in height.

(2) Indicators shall be located above the car control panel or above the door.

(3) As the car passed the floor and when a car stops at a floor served by the elevator, the corresponding character shall illuminate.

(4) The signal shall be an automatic verbal annunciator that announces the floor at which the car is about to stop. The verbal announcement indicating the floor shall be completed prior to the initiation of door opening.

EXCEPTION: For elevators other than destination-oriented elevators that have a rated speed of two hundred feet per minute or less, a nonverbal audible signal with a frequency of 1500 Hz maximum that sounds as the car passes or is about to stop at a floor served by the elevator shall be permitted.

(5) The verbal annunciator shall be ten dBA minimum above ambient, but shall not exceed eighty dBA, measured at the annunciator.

(6) The verbal annunciator shall have a frequency of 300 Hz minimum and 3000 Hz maximum.

(7) Nonverbal audible annunciators must be at least twenty decibels with a frequency no higher than 1500 Hz.

EXCEPTION: Special purpose and residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02525 What is required for installation and operation of emergency communication systems? Every elevator must contain an emergency two-way communication system. The installation and operation of this emergency communication system must comply with the ASME A17.1 code in effect when the department issued the elevator's installation permit. In addition to the appropriate ASME A17.1 code, the following requirements apply:

(1) The communication device located in the elevator car must comply with the following:

(a) The maximum height of any operable part of the communication system is forty-eight inches above the floor.

(b) Raised symbols and letters must identify the communication

system. These symbols and letters must be located adjacent to the communication device. The characters used must be:

- (i) At least 5/8 inches but no more than two inches high;
- (ii) Raised 1/32 inch;
- (iii) Upper case;
- (iv) Sans serif or simple serif type; and
- (v) Accompanied by Grade 2 Braille.

(c) If the system is located in a closed compartment, opening the door to the compartment must:

- (i) Require the use of only one hand without tight grasping, pinching, or twisting of the wrist; and
- (ii) Require a maximum force of five pounds.

(d) The emergency communication system must not be based solely upon voice communication since voice-only systems are inaccessible to people with speech or hearing impairments. An indicator light must be visible when the telephone is activated. This nonverbal means must enable the message recipient to determine the elevator's location address and, when more than one elevator is installed, the elevator's number.

(e) The emergency communication system must use a line that is capable of communicating with and signaling to a person or service that can respond appropriately to the emergency at all times.

(2) A communication device must be installed in the lobby adjacent to the Phase I key switch. This device must be a two-way communication device used to communicate with individuals in the elevator.

(a) The height of any communication device(s) located in the lobby must be located between forty-eight and sixty inches above the floor.

(b) Additional communication device(s) may also be located in other parts of the building in addition to the one located in the lobby.

EXCEPTION: Elevators that have less than sixty feet of travel do not require an intercom.

(3) Subsections (1) and (2) of this section do not apply to special purpose elevators. However, residential and special purpose elevators must have a means of communication located inside the elevator cab. This communication device must be available at all times.

EXCEPTION: Residential inclined elevators are exempt from this section.

NEW SECTION

WAC 296-96-02530 What requirements apply to the size and location of car handrails? A handrail must provide coverage lengthwise at least ninety percent from wall to wall.

- (1) A handrail must be installed on all car walls not used for

normal exits. The handrails must be:

(a) Attached to the wall at a height of between thirty-two and thirty-five inches from the floor.

(b) Attached to the wall with a 1-1/2 inch space between the wall and the rail;

(c) Constructed with the hand grip portion not less than 1-1/4 inches but not more than two inches wide;

(d) Constructed with a cross-section shape that is substantially oval or round;

(e) Constructed with smooth surfaces and no sharp corners. Approaching handrail ends on a blank wall in the interior corners of a car do not have to return to the wall. However, if the handrail is located on the closing door wall of a single-slide or two-speed entrance elevator and it projects an abrupt end towards people entering the car, the handrail end must return to the wall.

(2) Residential elevators must have at least one handrail. The handrail must be installed on a car wall not used for normal exits.

EXCEPTION: Special purpose elevators are exempt from this section.

NEW SECTION

WAC 296-96-02535 What requirements apply to floor designations on elevator door jambs? (1) Floor designations shall be provided in tactile characters complying with ANSI A117.1 section 703.3 located on both jambs of elevator hoistway entrances.

(2) Tactile characters must be two inches minimum in height.

(3) A tactile star shall be provided on both jambs at the main entry level.

(4) Tactile characters shall be raised 1/32 inch minimum above their background.

(5) Characters shall be uppercase.

(6) Characters shall not be italic, oblique, script, highly decorative, or other unusual forms.

(7) Characters and their background shall have a nonglare finish.

(8) Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

(9) Braille shall be contracted Grade 2 Braille and comply with ANSI A117.1 section 703.4.

(10) Braille shall be forty-eight inches minimum and sixty inches maximum above the floor, measured to the base line of the Braille cells.

(11) Characters shall be permanently attached (meaning tools required to remove).

Note: See ASNI A117.1 for a complete list of requirements.

EXCEPTION: Special purpose and residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02540 What are the installation and operation requirements for hall buttons? (1) A clear floor space complying with ANSI A117.1 section 305 shall be provided at call controls.

(2) Objects beneath hall call buttons shall protrude one inch maximum.

(3) Call buttons and keypads shall be located within one of the reach ranges specified in ANSI A117.1 section 308 measured to the centerline of the highest operable part. In no instance shall they be lower than thirty-six inches.

(4) Call buttons shall be raised or flush.

(5) Call buttons shall be 3/4 inch minimum in the smallest dimension.

(6) The call button that designates the up direction shall be located above the call button that designates the down direction.

(7) Call buttons shall have visible signals to indicate when each call is registered and when each call is answered.

EXCEPTION: Special purpose and residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02545 What are the requirements for installation and operation of hall lanterns? (1) A visible and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call and the car's direction of travel. Where in-car signals are provided, they shall be visible from the floor area adjacent to the hall call buttons.

(2) Visible signal fixtures shall be centered at seventy-two inches minimum above the floor. The visible signal elements shall be 2-1/2 inches minimum measured along the vertical centerline of the element. Signals shall be visible from the floor area adjacent to the hall call button.

(3) Audible signals shall sound once for the up direction and twice for the down direction, or shall have verbal annunciators that indicate the direction of elevator car travel.

(4) Audible signals shall have a frequency of 1500 Hz maximum. Verbal annunciators shall have a frequency of 300 Hz minimum and 3000 Hz maximum.

(5) The audible signal or verbal signal annunciator shall be

10 dBZ minimum above ambient, but shall not exceed 80 dBA, measured at the call button.

HOISTWAY AND PIT

NEW SECTION

WAC 296-96-02550 What are the requirements for underground hydraulic elevator pipes, fittings, and cylinders? All newly installed underground pressure cylinders and pipes containing hydraulic elevator fluids shall be encased in an outer plastic containment.

(1) The plastic casing shall be constructed of polyethylene or polyvinyl chloride (PVC). The plastic pipe wall thickness must not be less than 0.125 inches (3.175 mm). The casing shall be capped at the bottom and all joints must be solvent or heat welded.

(2) The casing shall be sealed and dry around hydraulic pipe and cylinder to contain any leakage into the ground and to prevent electrolysis to the hydraulic pipe and the cylinder. Dry sand may be used to stabilize the hydraulic cylinder.

(3) A one-half inch pipe nipple with a one-way check valve shall be located between the casing and cylinder for monitoring purposes.

(4) Alternate methods must receive approval from the department prior to installation.

(5) This rule shall apply to all conveyances with installation permits issued by the department on or after 01/01/1993.

NEW SECTION

WAC 296-96-02555 What are the requirements for accessing elevated elevator pit equipment? Where elevated pit equipment requires assisted vertical access of more than five feet, a permanent noncombustible working platform shall be provided. Access to the platform must be by a fixed ladder or stair conforming to ANSI A14.3. The platform shall be of sufficient strength to support personnel and may be of open grillwork.

In residential installations where the pit depth exceeds three feet, a fixed vertical ladder, designed to the current adopted rules for commercial installations, must be provided.

NEW SECTION

WAC 296-96-02560 What are the requirements for submersible pumps or sumps? Sump pumps and drains are not required in elevator pits. Sump holes must be installed and measure a minimum of eighteen inches by eighteen inches by eighteen inches. If drains or sump pumps are installed, they must not be directly connected to sewers and/or storm drains. P-traps and check valves are not allowed. All installations must meet the NEC and all plumbing codes. Drains meeting the above requirements may be installed in lieu of sump holes.

Sump hole covers must be designed to withstand a load of three hundred pounds per square foot.

NEW SECTION

WAC 296-96-02565 What are the requirements for top of car lighting for freight and passenger elevators? A permanently wired work light and outlet shall be installed on the top of freight and passenger elevators. The light(s) shall provide illumination of ten foot candles across the entire horizontal plane of the top of the car up to a height of six feet. The fixture(s) shall be protected from accidental breakage.

NEW SECTION

WAC 296-96-02570 How do we enforce hoistway ventilation? (1) Area of vents. Except as provided for in Section 3004.3.1, the area of the vents shall not be less than 3-1/2 percent of the area of the hoistway nor less than three square feet (0.28 m²) for each elevator car, and not less than 3-1/2 percent nor less than one-half square foot (0.047 m²) for each dumbwaiter car in the hoistway, whichever is greater. The total required vent area shall be equipped with dampers that remain powered closed until activated open by the fire alarm system panel. The dampers shall open upon loss of power.

(2) Activation of the powered vent must not be from the same device that activates the phase one fire recall.

NEW SECTION

WAC 296-96-02575 How do we enforce hoistway pressurization? Pressurization requirements. Elevator hoistways shall be pressurized to maintain a minimum positive pressure of 0.10 inches of water column with respect to adjacent occupied space on all floors and a maximum pressure so as to not prevent the automatic operation of the elevator doors, as well as accounting for the stack and wind effect expected on the mean low temperature January day. This pressure shall be measured at the midpoint of each hoistway door, with all hoistway doors open at the designated primary recall level and all other hoistway doors closed. The supply air intake shall be from an outside, uncontaminated source located a minimum distance of 20 feet from any air exhaust system or outlet.

(1) Elevator doors. Each elevator door shall operate properly when hoistway pressurization is in effect.

(2) Hoistway venting. Hoistway venting required by Section 3004 need not be provided for pressurized elevator shafts.

(3) Machine rooms. Elevator machine rooms shall be pressurized in accordance with this section unless separated from the hoistway shaft by construction in accordance with the International Building Code, Section 707.

(4) Special inspection. Special inspection for performance shall be required in accordance with the International Building Code, Section 909.18.8. System acceptance shall be in accordance with the International Building Code, Section 909.19.

(a) The elevator department must observe the operation of the doors and insure proper documentation and tags are on site.

(b) Devices shall have an approved identifying tag or mark on them consistent with the other required documentation and shall be dated indicating the last time they were successfully tested and by whom.

OUTSIDE HOISTWAY

NEW SECTION

WAC 296-96-02580 Are keys required to be on-site? The keys to the machine room and the keys that are necessary to operate the elevator must be located in a locked key retainer box in the elevator lobby at the designated level above the hall buttons, or located by machine room doors at no more than six feet above the floor, provided access to the key box doesn't require passage

through locked doors. If in order to meet this requirement the box would be located in an unsecured location (such as the outside portion of a condo), other arrangements shall be accommodated with the written permission of the department.

The key retainer box must be:

- Readily accessible to authorized personnel;
- Clearly labeled "ELEVATOR";
- Securely mounted;
- Equipped with a 1-inch mortise cylinder cam lock with keyway set to a #39504 Fort type key and securely mounted;

Further:

- Keys for access to elevator machine rooms and for operating elevator equipment must be tagged and kept in the key box.
- The box must contain all keys.
- Mechanical hoistway access devices must be located in the key box or machine room.

EXCEPTION: Residential elevators are exempt from this section.

NEW SECTION

WAC 296-96-02585 What are the requirements for fire doors installed in front of hoistway doors? If fire and/or smoke doors are required to be installed by the International Building Code or the local building official, they must:

- (1) Not be permanently attached to the hoistway door assembly.
- (2) Not encroach upon the full width and height of the hoistway door opening.
- (3) Ensure the adherence to ANSI A117.1 as to hall buttons, lanterns, jamb markings, key switches and position indicators locations and line of sight.

LULA

NEW SECTION

WAC 296-96-02590 When does the department require a local building official to sign off for the installation of LULAs, stair lifts, inclined wheelchair lifts and vertical wheelchair lifts? In existing buildings where LULAs, stair lifts, inclined wheelchair

lifts and vertical wheelchair lifts are to be installed, the local building official must signify that he/she is allowing this type of conveyance on a form provided by the department.

NEW SECTION

WAC 296-96-02595 What are the general requirements for LULA elevators? (1) LULAs may be permitted in churches, private clubs, and buildings listed on the historical register that are not required to comply with accessibility requirements.

(2) Installation of LULAs in existing buildings that are not required to comply with accessibility requirements will be considered on a case-by-case basis by the department.

(3) For LULAs installed according to subsections (1) and (2) of this section a form provided by the department must be signed by the local building official.

(4) LULAs must be equipped with an emergency communication device meeting the requirements of WAC 296-96-02330.

ACCESSIBILITY EQUIPMENT

NEW SECTION

WAC 296-96-02600 What is required for physically handicapped lifts? (1) All inclined stairway chairlifts and inclined and vertical wheelchair lifts installed in buildings where the conveyance is not visible at all times must be equipped with a standard electric switch Chicago style lock and #2252 key.

(2) All inclined stairway chairlifts and inclined and vertical wheelchair lifts installed in residences licensed as group homes must be equipped with a standard electric key switch Chicago style lock and #2252 key.

(3) All inclined stairway chairlifts and inclined and vertical wheelchair lifts installed in schools, day care centers, churches and other facilities which typically accommodate or provide services for children must also be equipped with a standard electric key switch Chicago style lock and #2252 key.

(4) Where these conveyances are installed outdoors, they must be equipped with either a standard electric key switch Chicago style lock and #2252 key or a timing device. The timing device

must not allow the conveyance to run outside of normal business hours.

(5) In locations where the conveyance is not visible at all times, the conveyance must be equipped with a means of two-way communication that is capable of communicating with and signaling to a person or service that can respond appropriately at all times.

EXEMPTION: Inclined stairway chairlifts and inclined and vertical wheelchair lifts in private residences are not required to be equipped with key switches.

(6) Beginning July 1, 2004, vertical wheelchair lifts in commercial installations must be equipped with low energy power-operated doors or gates complying with ANSI/BHMA A156.19. Doors and gates shall remain open for twenty seconds minimum. End doors shall be thirty-two inches minimum clear width. Side doors shall be forty-two inches minimum clear width.

EXCEPTION: Lifts having doors or gates on opposite sides shall be permitted to have manual doors and gates.

(7) For purposes of this section, "not visible at all times" includes, but is not limited to, conveyances located in stairwells, auditoriums, and other areas which are not generally in the normal path of travel during the hours that the building is occupied.

NEW SECTION

WAC 296-96-02605 Are private residence inclined stairway chairlifts required to be permanently wired? Private residence inclined stairway chairlifts are not required to be permanently wired into a structure. These conveyances may be equipped with a cord and plug. The plug must be directly inserted into a wall receptacle that is protected by a fuse or a circuit breaker at its source and is capable of supporting the additional load on the circuit. The source must be identified either at the receptacle or at the feeder panel. The cord must be secured in a manner that will not create any tripping hazards.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05020 What requirements apply to the construction and fire safety of hoistway enclosures? Generally, local codes and ordinances govern hoistway enclosure construction. When not in conflict with a local code requirement, the enclosure must:

(1) Be built to a height of 7 feet above each floor, landing and adjacent stairway tread;

(2) Extend (adjacent to the counterweights) the full height of

the floor and 8 inches beyond the counterweight raceway;

(3) Be constructed of either solid material or material with openings that will reject a 2-inch diameter ball; and

(4) Be supported and braced so that it does not deflect more than 1 inch when subjected to a force of 100 pounds applied perpendicular at any point.

(5) A full height hoistway enclosure is required only on the side(s) of the material lift for which the car is not equipped with a gate or enclosure.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05120 What requirements apply to car operating devices, terminal stopping devices and electrical protective devices? If electrically operated, such devices must be enclosed. On lifts driven by winding drum machines, there must be a slack rope device employing an enclosed electric switch (manually reset type) which halts power to the drum and brake when the hoisting rope becomes slack.

On other lifts suspended by flexible means such as chain, there must be a slack rope/chains device employing an enclosed electric switch (manually reset type) which halts power to the machine and brake when the suspension means becomes slack.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05140 What requirements apply to car safeties? Car safeties must be used on all material lifts that are suspended by wire ropes or chains. They must be able to stop and sustain a car carrying 125 percent of its rated load. On lifts driven by rack and pinion machines:

(1) Car safeties will consist of a freely rotating safety pinion, an overspeed governor and a safety device which may be mounted on the car.

(2) The rotating pinion driving an overspeed governor will travel on a stationary rack which is vertically mounted in the hoistway.

(3) The governor will actuate the safety device when the downward speed of the car reaches the tripping speed and will bring the car to a gradual stop.

(4) Car safeties must be able to stop and sustain a car carrying one hundred twenty-five percent of its rated load.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-05160 What types of ropes, chains, and rope connections must be used on a lift? (1) The following general requirements apply:

(a) Iron (low carbon steel) or steel wire ropes with fiber cores must be used to suspend cars and counterweights.

(b) The minimum safety factor for suspension ropes must be 6 times the manufacturers rated breaking strength per rope.

(c) The car, the counterweight end of the car and the counterweight wire ropes (or the stationary hitch ends where multiple roping is used) must be fastened so that the looped ends of the turned back portion in the rope sockets are clearly visible. Fastenings must either be:

(i) Individual tapered, babbitted rope sockets; or

(ii) Other types of department approved rope fastenings.

(d) Rope sockets must develop at least 80 percent of the breaking strength of the strongest rope used in the sockets.

(e) U-bolt rope clips (clamps) cannot be used for load fastenings.

(f) A metal or plastic data tag must be securely attached to one of the wire rope fastenings each time the ropes are replaced or reshackled. The data tag must include:

(i) The diameter of the ropes in inches; and

(ii) The manufacturer's rated breaking strength.

(iii) The month and year the ropes or chain were installed.

(iv) The name of the person or organization who installed the ropes.

(v) All replacements of wire rope or chain must be in accordance with the lift manufacturer's specifications.

(2) The following requirements apply to specific types of material lifts:

(a) Traction type lifts must use at least three hoisting ropes.

(b) Lifts suspended by hoisting chains must comply with the chain manufacturer's specifications for maintenance, inspection, and application.

(c) Lifts using roller chain type lifting chains must use chains with a six to one safety factor based on ASME/ANSI B-29.1M minimum (not average) chain strength.

(d) Drum type lifts, must use either at least two hoisting ropes or a secondary as well as a primary load path to the hoist must be employed. Also, the cable secured to the drum must be at least one and one-half turns around the drum when the carrier is at its extreme limit of travel.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07030 Does the department approve private residence elevator plans and specifications? Yes. (1) Before commencing construction of any inclined private residence elevator the ((owner)) licensed installer must submit complete plans and specifications to the department for approval.

(2) Plans and specifications covering the installation of an inclined private residence elevator must be endorsed by a professional engineer before the department will approve the plans.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07050 What are the construction requirements for car landing enclosures and gates for inclined private residence elevators? Any landing enclosures and gates must have:

(1) A railing at least 42 inches high to protect all landing platforms and those areas of a building used as landing platforms; and

(2) A gate whose height is equal to the height of the railing to protect the passenger landing opening.

(a) Gates may either be a horizontally sliding type or a swing type; and

(b) All gates must be equipped with a latch that holds the gate closed and an electrical contact to prevent movement of the car when a gate is open; and

(3) Railing enclosure and gate shall reject a 1.5 inch diameter ball.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07120 What construction requirements apply to car doors and gates? (1) All car entrances must be protected by a door or gate. The height of the door or gate must be at least 42 inches and equal to the height of the car enclosure. Doors and gates may be either of a solid design or an openwork design. If of an openwork design, the door or gate must be able to reject a 3-inch diameter ball. After the effective date of these rules the diameter will be reduced to 1.5 inches.

(2) Car doors or gates must be equipped with an electric contact that prevents the elevator from operating unless the door

or gate is securely closed. If the gate is a swing type opening outward from the car, the electric contact must not be made until the gate is securely latched.

(3) All car doors or gates must be manually operated.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07150 What are the construction requirements for guide rails, track supports and fastenings? (1) Guides, guide rails, guide rail brackets, splice plates, and fastenings must be made of steel or other metals conforming to the requirements of this section.

(2) Guides, guide rails, guide rail brackets, and their fastenings and supports must, at the point of support, deflect 1/8 inch or less while resisting horizontal forces encountered during loading. When horizontal force is measured at a mid-point between brackets, guide rails must deflect 1/4 inch or less in any direction.

Fixed, suspended cable guides may be used as a guide member(s). When used, the deflection is to be specified by the manufacturer and approved by a structural engineer licensed in the state of Washington.

(3) The top and bottom of each guide or guide rail run must not allow a car and counterweight guiding members to travel beyond the guide rail ends.

~~((4) Guides for inclined private residence elevators must have no more stresses and deflection than allowed by the manufacturer's specifications.))~~

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07171 How and when are safeties and governors tested? (1) A safety must be tested before the inclined private residence elevator is put into service. It must be tested while the elevator is carrying its rated load.

(2) Governors on instantaneous type safeties must be tested by hand tripping the governor while the elevator is traveling at its rated speed. Creating sufficient slack in the rope and dropping the elevator is ~~((the))~~ a method of testing speed governors located on ~~((a))~~ an elevator or chassis.

WAC 296-96-07180 What are the construction requirements for driving machines and sheaves? (1)(a) Winding drums, traction sheaves, overhead sheaves and deflecting sheaves must:

- (i) Be made of cast iron or steel;
- (ii) Have diameters at least 30 times the diameter of the wire hoisting ropes; and
- (iii) Have machined rope grooves.

(b) EXCEPTION:

(i) If 8 x 19 steel ropes are used, drum and sheave diameters may be reduced to 21 times the diameter of the hoisting rope.

(ii) Existing incline lifts suspended by cables are not required to have machine grooves, except for the first row of cables wrapped on the drum and shall be required to have a tracking device.

(iii) On existing inclined lifts suspended by cables that do not have machine grooves on the drum, the first layer of ropes will be recognized as providing the same traction as grooves, provided that this layer remains on the drum at all times and is not allowed to wind out. Such lifts must be provided with a tracking device to ensure that the rope does not wind over itself on the drum.

(2) The factor of safety, based on the static load (the rated load plus the weight of the car, ropes, counterweights, etc.) to be used in the design of driving machines and sheaves, must be at least:

(a) Eight for driving machines and sheaves built of wrought iron and steel; or

(b) Ten for driving machines built of cast iron, cast steel or other materials.

(3) Set screw type fastenings must not be substituted for keys or pins if connections are subject to torque or tension.

(4) Gears:

(a) When connecting drums or sheaves to the main driving gear, friction gears, clutch mechanisms or couplings must not be used.

(b) Worm gears having cast iron teeth must not be used.

(5) Brakes:

(a) Electric brakes must be of the friction type set by springs and must release electrically.

(b) All brakes must be able to stop and hold ((a)) an elevator carrying 125 percent of its rated load.

(c) At least one brake must be mounted so that in the case of gearbox failure, the drum will hold the rated load.

(d) If a single ground or short-circuit, a counter-voltage or a motor field discharge occurs and the operating device is set in the stop position, the brake magnet must set the brake.

(6) Driving machines:

(a) A driving machine may be mounted on ((a)) an elevator chassis or in a remote location. However, if mounted in a remote location, all sheaves and sprockets must be guarded and positioned so the hoisting ropes and chains remain properly aligned while the

elevator is in use.

- (b) Screw type machines must not be used.
- (c) Hydraulic driving machines must conform to ASME A17.1.
- (d) Roped-hydraulic machines may be used.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-07190 What construction requirements apply to terminal stopping switches? A hoistway must be equipped with normal upper and lower terminal stopping switches that are activated by ((a)) an elevator chassis. Normal upper and lower terminal stopping switches must stop the elevator at the normal top and bottom terminals of travel.

(1) A hoistway must be equipped with final terminal stopping switches that are activated by ((a)) an elevator chassis. These switches must stop the elevator if the elevator travels beyond the normal terminals and prevent the elevator from moving in either direction.

(2) Winding drum machines may use a slack cable switch instead of a bottom final terminal switch.

(3) Normal and final terminal stopping switches must not control the same switches on the controller unless at least two separate and independent switches are used. At least two of these separate switches must be closed in order to complete the motor and brake circuits for each direction of travel.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-07200 What are the requirements for operation of an inclined private residence elevator? (1) If the activation of the elevator is by key switch or key pad it must conform to the requirements of (a) and (b) of this subsection. The department may approve alternative methods of equal security such as key card or magnetic swipe card. Methods must conform to the following:

(a) The key or code must be entered each time to move the elevator.

(b) Key-operated switches must be of the spring return type and must be operated by a weatherproof cylinder type lock having not less than five pin or five disc combination with the key removable only when the switch is in the off position.

(2) If activation of the elevator is provided by a timing circuit that only allows the circuits to be initiated or unlocked

for a sufficient amount of time to allow passengers to board the elevator and begin transit, a separate activation switch on the car is not required. The operating circuits must automatically relock:

(a) If the elevator is not activated within its preset period of time;

(b) When any landing stop button is activated;

(c) When the preset timing period has expired and the car has completed transit to another landing or returns to the departure landing.

(3) Emergency stop switches must be provided on or adjacent to the operating station.

(a) Stop switches in the car must:

(i) Be of a manually opened and manually closed type;

(ii) Have red handles or buttons and be conspicuously marked "STOP";

(iii) Open even if springs fail when springs are used.

(b) Stop switch at other operating stations:

(i) May be of a momentary type;

(ii) Must have red handles or buttons and be conspicuously marked "stop";

(iii) Must open even if springs fail when springs are used;

(iv) After initiation of stopping, the car may not automatically restart. Run condition must be manually initiated.

(4) Design and installation of control and operating circuits must meet the following:

(a) Control systems based upon the completion or maintenance of an electric circuit must not be used for interrupting power and applying machine brakes at terminals; stopping elevators when an emergency stop switch is open or when any electrical protective device operates; stopping a machine when the safety applies.

(b) If springs are used to activate switches, contact, or circuit breaking relays to stop the elevator at a terminal, the springs must be of the restrained compression type.

(5) Hand rope operation must not be used.

(6) Radio controls may be used in lieu of wiring for all car controls provided:

(a) The system is set up so that it is fail safe (if contact is lost, the unit will stop);

(b) In such installations, the ~~((stop))~~ STOP button in the car shall ~~((interrupt the circuit of frequency))~~ open the contact, and maintain an open condition, so that the car stops in the fail-safe mode as described in (a) of this subsection; and

(c) The controls are permanently mounted and conform to code.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07210 What are the construction requirements for

suspension methods? (1) When a chassis is suspended from a driving machine by a wire rope, a single method of suspension may be used. The suspension means may be any one of the following:

- (a) Steel elevator wire rope;
- (b) Steel aircraft cable; or
- (c) Roller chain conforming to ANSI transmission roller chains and sprocket teeth.

- (2) Steel tapes must not be used as a suspension method.

- (3) The minimum diameter of hoist ropes or cables must be 1/4 inch ((~~for~~)) galvanized elevator wire rope and 3/16 inch ((~~for galvanized~~)) aircraft cable.

- (4) Factor of safety:

- (a) The minimum factor of safety for a suspension method is 8 based upon the rope tension while elevating a car carrying its rated load.

- (b) In no case, must the rated breaking strength of the rope be less than 4,000 pounds.

- (5) The contact arc of a wire rope on a traction sheave must be sufficient to produce adequate traction under all load conditions.

- (6) All wire ropes anchored to a winding drum must have at least one full turn of rope on the drum when the car or counterweight reaches its over-travel limit.

- (7) The winding-drum ends of car and counterweight wire ropes must be secured by:

- (a) Clamps on the inside of the drum; or
 - (b) Return loop; or
 - (c) Properly made individual tapered babbitted sockets; or
 - (d) Properly attached fittings recommended by wire rope manufacturers.

- (e) U-bolt type clamps must not be used.

- (8) The ends of wire ropes must be fastened to cars or counterweights by:

- (a) Return loop; or
 - (b) Properly made individual tapered babbitted sockets that conform to ASME A17.1 requirements. (The diameter of the hole in the small end of the socket must not exceed the nominal diameter of the rope by more than 3/32 inch.); or properly attached fittings recommended by wire rope manufacturers.

- (c) U-bolt type clamps must not be used.

- (9) Rope repair:

- (a) Car and counterweight wire ropes cannot be lengthened or repaired by splicing.

- (b) If a single wire rope in a set is worn or damaged and needs to be replaced, the entire set must be replaced.

PART C2 - CONSTRUCTION, OPERATION, MAINTENANCE AND INSPECTION OF INCLINED PRIVATE RESIDENCE ELEVATOR FOR TRANSPORTING PERSON(S)

~~((FOR RESIDENTIAL USE))~~

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-07230 What requirements apply to electrical wiring? (1) All wiring must conform to the National Electrical Code (NEC) in effect at the time of installation or major alteration.

(2) If a driving machine is mounted on the elevator chassis, the electrical connections between the elevator and the power source must be able to stop power if a traveling cable parts.

(3) All electrical connections between the elevator and the stationary connections must be insulated flexible conductors conforming to the applicable articles in the NEC relating to Elevators, Dumbwaiters, Escalators, Moving Walks, Wheelchair Lifts, and Stairway Chair Lifts.

(4) An elevator mechanic employed by an elevator contractor may perform electrical work from the electrical disconnect to and including the elevator operating control systems.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-08200 What are the requirements for the activation and operation of an inclined private residence conveyances for transporting property? (1) If activation of the conveyance is by key switch, key pad or swipe card, the activation and operation must conform to the requirements of (a) and (b) of this subsection. The department may approve alternative methods of equal security.

(a) The key or code must be entered each time to move the conveyance.

(b) Key-operated switches must be of the spring return type and must be operated by a weatherproof cylinder type lock having not less than five pin or five disc combination with the key removable only when the switch is in the off position.

(2) If activation is provided by a timing circuit that only permits the circuits to be initiated or unlocked for a sufficient amount of time to allow the loading of materials, the operating circuits must automatically relock:

(a) If the conveyance is not activated within its preset period of time;

(b) When any landing stop button is activated; or

(c) When the car has completed transit to another landing or

returns to the departure landing.

(3) Emergency stop switches must be provided on or adjacent to the operating station. Stop switches:

(a) May be of a momentary type;

(b) Must have red handles or buttons and be conspicuously marked "STOP"; and

(c) Must open even if springs fail when springs are used.

(4) After initiation of stopping, the car may not automatically restart. Run condition must be manually initiated.

(5) Design and installation of control and operating circuits must meet the following:

(a) Control systems based upon the completion or maintenance of an electric circuit must not be used for interrupting power and applying machine brakes at terminals, stopping elevators when an emergency stop switch is open or when any electrical protective device operates, or for stopping a machine when the safety applies.

(b) If springs are used to activate switches, contact, or circuit breaking relays to stop the elevator at a terminal, the springs must be a restrained compression type.

(6) Hand rope operation must not be used.

(7) For inclined private residence conveyances installed before January 1, 2008, radio controls may be used in lieu of wiring for all car controls provided:

(a) The system is set up so that it is fail safe (if radio contact is lost, the unit will stop);

(b) In such installations, the stop button in the car shall interrupt the circuit of frequency; and

(c) The controls are permanently mounted and comply with the applicable rules.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08210 What are the requirements for suspension methods? (1) When a chassis is suspended from a driving machine by a wire rope, a single method of suspension may be used. The suspension means may be any one of the following:

(a) Steel elevator wire rope;

(b) Steel aircraft cable; or

(c) Roller chain conforming to ANSI transmission roller chains and sprocket teeth.

(2) Steel tapes must not be used as a suspension method.

(3) The minimum diameter of hoist ropes or cables must be ((3/8)) 1/4 inch ((for)) galvanized elevator wire rope and 3/16 inch ((for galvanized)) aircraft cable.

(4) Factor of safety:

(a) The minimum factor of safety for a suspension method is 5 based upon the rope tension while elevating the elevator carrying

its rated load.

(b) In no case, must the rated breaking strength of the rope be less than 4,000 pounds.

(5) The contact arc of a wire rope on a traction sheave must be sufficient to produce adequate traction under all load conditions.

(6) All wire ropes anchored to a winding drum must have at least one full turn of rope on the drum when the car or counterweight reaches its over-travel limit.

(7) The winding-drum ends of car and counterweight wire ropes must be secured by:

- (a) Clamps on the inside of the drum;
- (b) Return loop;
- (c) Properly made individual tapered babbitted sockets; or
- (d) Properly attached fittings recommended by wire rope manufacturers. U-bolt type clamps must not be used.

(8) The ends of wire ropes must be fastened to cars or counterweights by:

- (a) Return loop;
- (b) Properly made individual tapered babbitted sockets that conform to ASME A17.1 requirements (The diameter of the hole in the small end of the socket must not exceed the nominal diameter of the rope by more than 3/32 inch.); or
- (c) Properly attached fittings recommended by wire rope manufacturers. U-bolt type clamps must not be used.

(9) Rope repair:

- (a) Car and counterweight wire ropes cannot be lengthened or repaired by splicing.
- (b) If a single wire rope in a set is worn or damaged and needs to be replaced, the entire set must be replaced.

(10) A metal or plastic data tag must be securely attached to one of the wire rope fastenings each time the ropes are replaced or reshackled. The data tag must include:

- (a) The diameter of the ropes in inches; and
- (b) The manufacturer's rated breaking strength.

**PART C3 - CONSTRUCTION, OPERATION, MAINTENANCE AND INSPECTION OF
PRIVATE RESIDENCE INCLINED CONVEYANCES FOR TRANSPORTING ONLY
PROPERTY ((~~FOR RESIDENTIAL USE~~))**

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-08230 What requirements apply to electrical wiring? (1) All wiring must conform to the NEC in effect at the time of installation or major alteration.

(2) If a driving machine is mounted on the conveyance chassis, the electrical connections between the conveyance and the power source must be able to stop power if a traveling cable parts.

(3) All electrical connections between the conveyance chassis and the stationary connections must be insulated flexible conductors conforming to the applicable articles of the NEC relating to Elevators, Dumbwaiters, Escalators, Moving Walks, Wheelchair Lifts, and Stairway Chair Lifts.

(4) An elevator mechanic employed by an elevator contractor may perform electrical work from the electrical disconnect to and including the elevator operating control systems.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-09001 What regulations apply to personnel hoists? All personnel hoist(~~s~~~~—installed~~) installations, maintenance, repair and tests must comply with the American National Standard Institute ANSI A10.4-~~((1990))~~ 2004 edition or the latest published edition adopted by ANSI, Safety Requirements for Personnel Hoists and Employee Elevators for Construction and Demolition Operations.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-10001 What regulations apply to material hoists? All material hoist(~~s~~) installations, maintenance, repair, and tests must comply with the American National Standard Institute ANSI A10.5-1992 edition or the latest published edition adopted by ANSI, Safety Requirements for Material Hoists.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-11001 What regulations apply to belt manlifts?
WAC ((296-96-11010 through 296-96-11078 applies)) 296-96-11016 through 296-96-11080 apply to all existing belt manlifts.

Belt manlifts installed between July 1, 2004, and January 1, 2008, must meet the requirements in ASME A90.1-1997.

After the effective date of these rules all belt manlift((s)) installations and alterations must ((be installed according to Belt Manlifts USAS)) meet ASME A90.1-((1997)) 2003.

All belt manlifts must be maintained, inspected and tested to conform to section 8 and appendix II of ASME A90.1-2003.

Maintenance inspection report shall be kept in a secure location within the building the belt manlift serves.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-13149 What are the structural requirements for counterweights, counterweight enclosures, and counterweight fastenings? All counterweights must be fully enclosed at landings or at the path of travel.

(1) At the bottom of a counterweight enclosure, there must be an inspection opening large enough to allow the inspection of cable fastenings, counterweight and buffer.

(2) Rectangular shaped counterweights must be secured by at least two ((and one-half)), half-inch mild steel bolts with lock nuts.

(3) Round counterweights must be fastened with a center bolt at least three quarter inch in diameter and secured with a lock nut.

(4) All bolt eyes must be welded closed.

(5) Cable fastenings shall be by babbitted tapered elevator sockets or other acceptable methods. If cable clamps are used, a minimum of three cable clamps must be provided. U-shaped clamps shall not be acceptable.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-16140 How must car frames and platforms be connected? Connections between members of the car frames and platform must be riveted, bolted, or welded and must meet the

following specifications:

(1) Bolts where used through sloping flanges of structural members must have (~~bolt heads~~) bolt heads of the tipped head type or must be fitted with beveled washers.

(2) Nuts used on sloping flanges of structural members must seat on beveled washers.

(3) Welding of parts upon which safe operation depends must be done in accordance with the appropriate standards established by the American Welding Society.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-23100 Are keys required to be on-site? Yes.

(1) The keys to the machine room and the keys that are necessary to operate the elevator must be located in a locked key retainer box in the elevator lobby; or located by machine room doors at no more than six feet above the floor, provided access to the key box doesn't require passage through locked doors. The key retainer box must be:

((●)) (a) Readily accessible to authorized personnel;

((●)) (b) Clearly labeled "Elevator"; and

((●)) (c) Equipped with a 1-inch cylinder cam lock key #39504.

Further:

((●)) Keys for access to elevator machine rooms and for operating elevator equipment must be tagged and kept in the key box.

((●)) The key box must contain all keys necessary for inspections of the elevator.

((●)) Mechanical hoistway access devices must be kept in the key box or machine room.

(2) The department may approve existing retainer boxes provided they are:

((●)) (a) Readily accessible to authorized personnel;

((●)) (b) Clearly labeled "elevator"; and

((●)) (c) The lock must be either a 1-inch cylinder cam lock key #39504 or a combination lock. The combination for the lock must be on record with the department.

Deviations from this section due to security concerns must be approved by the department via a variance request.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23116 What requirements apply to car numbers? In any building with more than one elevator, numbers at least two inches in height identifying each car must be located at the main lobby entrance, inside the car, on the machine, and on the disconnect switch and if the conveyance has a walk-in pit, the buffer stands.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-23117 What requirements apply to top of car railings for traction elevators? A standard railing must be installed on the top of all traction elevators where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds twelve inches horizontal clearance. The railing shall be substantially constructed of metal and shall consist of a top rail, intermediate rail and post. The top rail shall have a smooth surface and the upper surface shall be located at a vertical height of forty-two inches. The intermediate rail shall be located approximately halfway between the top rail and the car top. There must be a minimum of six inches of clearance above the top rail when the car is at its furthest point of travel (~~((on inspection mode))~~). If the vertical clearance from the car top to the hoistway enclosure, including gravity-stopping distance, is less than 48 inches away, the top handrail height may be reduced to 42 inches plus or minus 3 inches. If the clearances will not allow a 39-inch handrail, do not install the top of car railing, instead provide signage required by WAC 296-96-23119.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-23118 What requirements apply to top of car railings for hydraulic elevators in unenclosed hoistways? A standard railing must be installed on the top of hydraulic elevators installed in unenclosed hoistways. The railing shall be substantially constructed of metal and shall consist of a top rail, intermediate rail and post. The top rail shall have a smooth surface and(~~((, where practical))~~), the upper surface shall be located at a vertical height of (~~((forty-two))~~) 42 inches plus or minus 3 inches. The intermediate rail shall be located

approximately halfway between the top rail and the car top. There must be a minimum of six inches of clearance above the top rail when the car is at its furthest point of travel on ~~((inspection mode))~~ the mechanical stop. If the vertical clearance of 6 inches cannot be achieved, do not install car top railing, instead provide signage required by WAC 296-96-119.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-23119 What signage requirements apply to traction elevators with minimal overhead clearance? ~~((Traction))~~ Elevators that do not have a minimum of twenty-four inches of clearance from the crosshead, or any equipment mounted on the crosshead, to the lowest member of the overhead structure in the hoistway when the car has reached its maximum upward movement must have signage. A sign must be located near the top of car inspection station. An additional sign must be posted on the hoistway wall. This sign must be visible when accessing the car top. The sign shall consist of alternating four-inch diagonal red and white stripes and must clearly state "danger low clearance" in lettering not less than four inches in height.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23122 What type of lighting must be installed in machine rooms and machinery space? Permanent electric lighting must be provided in all machine rooms and machinery spaces. ~~((The))~~ All installations prior to 7/1/2004 require illumination ~~((must))~~ to be at least 10 foot-candles at floor level.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23132 What lighting requirements apply to pits?
(1) Installations prior to 7/1/2004 require a permanent lighting fixture producing at least 5 foot-candle at the pit floor must be installed in all pits.

(2) A light switch must be installed and must be accessible

from the pit access door.

(3) A permanent grounded outlet must be provided in all pits.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23316 What requirements apply to plunger stops?

Plungers must be provided with solid metal stops and/or other means to prevent the plunger from traveling beyond the limits of the cylinder. Stops must be designed and constructed so as to stop the plunger from maximum speed in the up direction under full pressure without damage to the connection to the driving machine, plunger, plunger connection, or any other parts of the hydraulic system. For rated speeds exceeding 100 feet per minute where a solid metal stop is provided, means other than the normal terminal stopping device (i.e., emergency terminal speed limiting device) must be provided to retard the car to 100 feet per minute with ((a)) retardation no greater than gravity, before striking the stop.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23450 What requirements apply to step tread lighting? Step treads and landings must be illuminated throughout ((~~their run~~)). The light intensity on the treads must not be ((~~in accordance with local codes and ordinances for stairways~~)) less than 5 ftc (54 kx).

((~~It is recommended that~~)) The illumination shall be ((~~of~~)) uniform intensity and ((~~that it~~)) shall not contrast ((~~significantly~~)) materially with that of the surrounding area.

NEW SECTION

WAC 296-96-23455 What requirements apply to comb and step distinction? There shall be a visual contrast between the comb and step, achieved by color, pattern, or texture.

NEW SECTION

WAC 296-96-23460 What requirements apply to safety zone? The entry and exit zone shall be kept clear of all obstacles. The width of the zone shall be not less than the width between the centerlines of the handrails plus eight inches. The length of the zone, measured from the end of the newel, shall be not less than twice the distance between the centerlines of the handrails.

EXCEPTION: On the entrance side, the safety zone distance may be reduced, when cart restriction devices are installed, with prior written permission.

NEW SECTION

WAC 296-96-23465 What requirements apply to landing access plates? Access plates at the top and bottom landings shall be properly located and securely fastened in place when no more than seventy lbf effort is required to open the access plate.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23600 What is the scope of Part VI, Alterations, Repairs and Maintenance? Subpart VI, Alterations, Repairs and Maintenance, applies to periodic inspections, tests, alterations, and maintenance. The applicable code references are: ASME A17.1-Part 8, ASME A18.1-Part 10, ASME A90.1-Part 8, and appendix 2, ANSI A10.4-Part 26 & 27, ANSI A10.5-Part 4, and other requirements in this chapter.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-23610 What requirements apply to routine periodic inspections and tests? The owner or the owner's agent must ensure that her/his conveyances are inspected and tested (~~((periodically))~~) on a periodic annual basis by a person qualified to perform such services. All conveyances must be tested to the applicable code(s) by an elevator mechanic licensed in the appropriate category for the conveyance being tested. (See appendix N in ASME A17.1.)

(1) For annual testing of electric, hydraulic, and roped hydraulic elevators, a log indicating the date of testing with all pertinent data included must be posted in the machine room. The log must be completed by the qualified person performing the test.

(a) A log indicating the date of testing with all pertinent data included must be posted in the machine room. The log must be completed by the licensed elevator mechanic performing the test.

(b) It is the responsibility of the owner or the owner's representative to install an updated log sheet in the machine room; the outdated log shall remain posted in the machine room.

(2) Required for fire fighters' service portion of the log. It is the owner's responsibility to test fire fighters' service operation of Phase I and Phase II key switches quarterly and annually perform the smoke detector test.

Note: The fire service key switch(es) and smoke detector testing may be performed and logged by the building owner.

~~((2)(a))~~ (3) For five-year testing ~~((of electric, hydraulic and roped hydraulic elevators a full load safety test must be performed with weights))~~:

(a) A full-load safety test must be performed with weights on all conveyances except hydraulic elevators.

(b) For roped hydraulic elevators a static load test with the full load on the car must also be performed.

(c) For tests administered under this subsection:

~~(i) ((A log indicating the date of testing with all pertinent data included must be posted in the machine room. The log must be completed by the licensed elevator mechanic performing the test.~~

~~((ii))~~ A safety tag with the date and company conducting the test must be permanently attached to the governor, safeties, and the rupture valves with a wire and seal.

~~((iii))~~ (A) For vertical platform lifts and stair chairs the tag must be located at the disconnecting means.

(B) Separate safety tags must be used to distinguish the no-load annual safety test and the five-year full load test.

(ii) Documentation must be submitted to the department on the approved state form.

~~((Note: Separate safety tags must be used to distinguish the no-load annual safety test and the five-year full load test.))~~

(d) Qualified people will conduct the test. A qualified person is either:

(i) An elevator mechanic licensed in the appropriate category for the conveyance being tested;

(ii) The representative of a firm that manufactured the particular material lift, and who holds a current temporary mechanic's license in this state; or

(iii) The representative of a firm that manufactured the particular material lift who is working under the direct supervision of an elevator mechanic licensed in the appropriate category for the conveyance being tested.

Escalators shall be tested and cleaned annually. Upon completion of this work, the appropriate form indicating that the work was done must be submitted to the department.

~~((3))~~ (4) All other conveyances requiring annual testing

must have tags indicating the date and the name of the company who performed the test. When the required location for mounting the tag is not readily accessible, the tag may be mounted on the main line disconnect.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23620 What requirements apply to alterations, repairs and maintenance? The owner or the owner's agent is responsible for the safe operation, proper maintenance, and alteration of his or her conveyance(s) and must comply with the present adopted ASME A17.1, Part ((XFF)) 8.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23630 What requirements apply to elevator equipment displaced by seismic activity? Any elevator equipment, hydraulic or cable ((type,)) that is displaced as a result of seismic activity must be anchored to conform with current standards, when repaired or reanchored to the building.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23710 What requirements apply to lifts for the physically handicapped? On installations prior to 7/1/2004: Inclined and vertical chairlifts and inclined and vertical wheelchair lifts installed only for use by persons with disabilities in locations other than in or at a private residence must be equipped with a standard electric switch Chicago lock with key #2252.

EXCEPTION: See WAC 296-96-02370 for key alterations.

This requirement is in addition to ASME ((A17.1, Part XX)) A18.1, and the current Washington state rules and regulations on barrier-free design located in ANSI A117.1 in effect via the State Building Code (IBC).

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 296-96-01007	What is the inspection and approval process for alterations?
WAC 296-96-02230	When must the department be notified for a new or altered inspection?
WAC 296-96-02232	What are the conditions for obtaining a temporary operating permit?
WAC 296-96-02235	What are the requirements for temporary operating permits?
WAC 296-96-02240	Where is a shut-off valve required for hydraulic elevators?
WAC 296-96-02275	What are the requirements for Fireman's Service Phase I and Phase II recall?
WAC 296-96-02276	What are the requirements for sprinklers in hoistways and machine rooms?
WAC 296-96-02277	How does the department enforce ASME requirements for sprinklers, smoke detectors, and heat detectors in hoistways and machine rooms?
WAC 296-96-02278	Are keys required to be on-site?
WAC 296-96-02280	Can pipes and ducts be installed above a machine room?
WAC 296-96-02281	What is required for emergency escape hatches?
WAC 296-96-02282	What is required for fire fighters' service?
WAC 296-96-02283	What is the minimum working space required in machine rooms?
WAC 296-96-02285	Are there exceptions for correction facility elevators?
WAC 296-96-02290	What are the requirements for underground hydraulic elevator pipes, fittings, and cylinders?
WAC 296-96-02300	Are self-leveling devices required?
WAC 296-96-02306	Is a door reopening device required on automatic-closing car doors?
WAC 296-96-02310	What is the minimum acceptable initial transfer time for an elevator door?
WAC 296-96-02315	What are the minimum cab size and other applicable requirements for car interiors?
WAC 296-96-02317	When does the department require a local building official to sign off for the installation of LULAs,

	stair lifts, inclined wheelchair lifts and vertical wheelchair lifts?
WAC 296-96-02318	What are the general requirements for LULA elevators?
WAC 296-96-02320	What is required for car controls?
WAC 296-96-02325	What are the location and operation requirements for car position indicators in the car?
WAC 296-96-02330	What is required for installation and operation of emergency communication systems?
WAC 296-96-02340	What requirements apply to the size and location of car handrails?
WAC 296-96-02350	What requirements apply to floor designations on elevator door jambs?
WAC 296-96-02355	What are the installation and operation requirements for hall buttons?
WAC 296-96-02360	What are the requirements for installation and operation of hall lanterns?
WAC 296-96-02361	What are the requirements for electrical main line disconnects?
WAC 296-96-02362	What are the requirements associated with elevator machine rooms?
WAC 296-96-02363	What are the requirements for fire doors installed in front of hoistway doors?
WAC 296-96-02364	What are the requirements for accessing elevated elevator pit equipment?
WAC 296-96-02366	What are the requirements for submersible pumps or sumps?
WAC 296-96-02367	What are the requirements for top of car lighting for freight and passenger elevators?
WAC 296-96-02370	What is required for physically handicapped lifts?
WAC 296-96-02371	Are private residence inclined stairway chairlifts required to be permanently wired?